

PRINCIPLES AND TECHNIQUES OF VOCATIONAL GUIDANCE

BY

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PREFACE

There are at least two good reasons for a new book on vocational guidance. First, the attention of educators and of the general public needs to be focused upon *vocational* guidance as something different from other worthy activities of school systems to which the term "guidance" has come to be applied. Second, it is highly desirable that the methods and techniques of vocational guidance be restated in the light of social, economic, and educational changes that have taken place in recent years.

The first of these reasons grows out of

1. A tendency on the part of some educators to use the term "guidance" as synonymous with "organized education."
2. A tendency on the part of many others to think of guidance in terms of individualized teaching.
3. A tendency on the part of others to treat guidance as synonymous with pupil personnel work.
4. A tendency on the part of still others to look upon guidance as consisting chiefly of mental hygiene.

As a natural result of such confusion of thought, sound progress in vocational guidance is retarded, since an uncritical public often assumes that any program labeled "guidance" serves vocational guidance needs, when, in fact, such a program may include little if any vocational guidance. And this is true at a time when numerous agencies of the federal government, state departments of education, and the general public are more concerned than ever before about helping youth find their way to genuine occupational satisfaction and success. It is imperative, therefore, that vocational guidance and its relationships be brought into sharper focus, especially in the minds of those who have responsibility for it in the schools.

Among the changes that make desirable a restatement of the methods and techniques of vocational guidance are

1. The period of schooling of American youth has been lengthened.
2. Entrance upon employment life has been deferred.

3. Means of obtaining needed data concerning the individual have been improved.

4. Needed information concerning occupations has become more readily available.

5. Important progress in school organization and administration has been made.

6. New agencies affecting the problem—CCC camps, the NYA, federal-state employment offices, and others—have been set up.

7. New social and economic conditions have arisen.

In this volume the author has undertaken the task of focusing attention upon vocational guidance and its relationships to education, to teaching, to pupil personnel work, and to other kinds or forms of guidance. He has endeavored, also, to take account of present-day conditions in his consideration of methods of performing various services that make up a comprehensive program of vocational guidance. At the same time he has recognized the necessity for certain other forms of guidance and has stressed the desirability of carrying these on along with vocational guidance. It is his hope that this volume will, in some measure at least, meet the needs in this important field.

The author's presentation of methods and techniques of vocational guidance differs somewhat from that of other books on the subject. The vocational guidance program is conceived of as including eight *services* which are essential if a school system is to provide adequate aid to youth in making the transfer from school to occupational life. The nature of each service is explained and then its methods and techniques are considered, each service occupying one or more chapters.

Although this volume is concerned primarily with vocational guidance in public secondary schools, the principles and methods presented are equally valid in any situation where youth or adults need assistance in "choosing an occupation, preparing for, entering upon, and progressing in it."

The material here presented should prove helpful not only to special workers in the field but to all school people who are genuinely interested in youth and their problems—school superintendents, secondary school principals, teachers, librarians, evening school workers, and others. Parents of adolescents, social workers, educational directors of Civilian Conservation

Corps camps, counselors and interviewers of public employment offices, National Youth Administration workers, and leaders of organizations and of committees that concern themselves with youth also should find much in this book that is worthy of their attention.

The author wishes gratefully to acknowledge his indebtedness to Cleo Murtland, William Clark Trow, Clifford Woody, Warren K. Layton, Verne C. Fryklund, Francis X. Lake, and Lyle M. Spencer, for helpful criticisms and suggestions; to Alice Mohrmann Downs for valuable assistance in preparing and editing the manuscript and the lists of references; and to numerous publishers and authors for the privilege of quoting, in a few cases at some length, from their publications.

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EDITOR'S INTRODUCTION

No profession regards its record or examines its aims more critically than does the American teaching body, and few have greater cause for pride in group achievement. Within the brief compass of a century, a craft of literacy mechanics has gone far toward becoming a profession of social engineering. One hundred years ago the teachers of the United States, from one-room rural schools to college lecture rooms, were concerned almost exclusively with the imparting of verbal and numerical skills. Today they are attempting the vastly more complex and comprehensive task of leading fellow learners to change their own ways in the direction of great ideals for community living.

This does not mean that skills are neglected in the modern school. The effective school of today must in fact teach them better than they were taught a century ago. The skills and information taught today, whether verbal, numerical, aesthetic, social, or scientific, are richer, stronger, and more complex than they were one hundred years ago precisely because they are now taught as tools and devices for the achievement of great ends rather than as ends in themselves. When they are not so taught in strict subordination to the social purposes of education, as is unfortunately the case in many islands of pedagogical instrumentalism still to be found, they exhibit a pitiful poverty of form and content beside the rich programs of the modern schools surrounding them.

Because the teachers of the United States are advancing their professional concepts, however, they remain profoundly dissatisfied with their professional advances. They search gloomily for weaknesses in their program. They look for difficulties and dangers that they may be able to meet them firmly and intelligently.

One of such dangers is exemplified in the development of the guidance movement. To give young people aid in the wise choice of an occupation was obviously direct education for better community life. Our profession therefore took up vocational

guidance with some enthusiasm. Techniques and procedures began to be developed for this purpose. Soon, however, it was seen that vocational guidance could not be given by itself in a corner, that it must be effectively related to the total pattern of education, and that the vocational guidance instruments had general educational uses of marked importance.

So began the educational *and* vocational guidance movement, which became in some quarters the guidance movement. The vitality and usefulness of this movement are unquestioned. It has been the greatest single force in the improvement of education in this country since the pioneer attempt early in the present century to apply quantitative measures to school processes. Nevertheless, like the testing movement, the guidance movement carries with it the possible seed of its own decay. Its proponents can become so engrossed in its techniques that they drift nearer and nearer the point of thinking that their movement is education itself. When they actually drop over that precipice the resulting impact flattens them all over the educational landscape, spreading them out to an incredible thinness, leaving them a somber warning that education is always education and that he who would make it all guidance, all measurement, all curriculum, all "activity," or all any other instrument has fallen from the status of educator to the lowly rank of a tool-conscious mechanic.

The author of the present book sees this danger clearly. He describes vocational guidance in direct and simple terms as an instrument to achieve social, economic, and educational purposes. He emphasizes the importance of giving specific services which will aid young people to transfer from school to occupation with a minimum of difficulty. He gives particular attention to community service guidance and proposes a new educational institution to meet the adjustment needs of out-of-school youth.

The author's long and distinguished service in this and closely related fields eminently qualifies him to make this statement. It is offered to the profession in the hope that it may contribute to the improvement of guidance as an instrument of better community education.

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February, 1941.

PRINCIPLES AND TECHNIQUES OF VOCATIONAL GUIDANCE

CHAPTER 1

WHAT IS VOCATIONAL GUIDANCE?

Scientific treatment of any subject requires consistent use of carefully defined terms. Essential also is a clear picture of relationships between the more important terms used. "Guidance," without a qualifying adjective, various kinds of guidance—"vocational," "civic," "social," "health," etc.,—as well as "pupil personnel work" and "education" are important terms appearing in this volume. It is, therefore, necessary that attention be given to the meaning of these and to their relationships.

In this undertaking it seems wise to begin with the question: What is vocational guidance?

Aside from the fact that this book deals primarily with vocational guidance, there are three other reasons for this approach. In the first place, "vocational" was the first of the many qualifying adjectives that have come to be applied to the term "guidance" in the literature of modern education. The combination of words "vocational guidance" first appeared in print, according to the best evidence available, in a brief report dated May 1, 1908, by Frank Parsons, director of the Vocation Bureau of Boston, Mass.¹ The bureau was organized in January, 1908, as an endowed enterprise connected with the Civic Service House of North Boston. The earliest reference to educational guidance found in the *Readers' Guide* is dated April, 1912. The reference is to an editorial bearing this title in the *Elementary School Teacher*. However, this editorial was not correctly named since it dealt wholly with vocational guidance as it was then defined.

¹ FREDERICK J. ALLEN, *Principles and Problems of Vocational Guidance*, p. 5, New York, McGraw-Hill Book Company, Inc., 1927.

Credit for the earliest serious use and discussion of educational guidance as something different from vocational guidance seems to belong to Truman L. Kelley, whose doctor's dissertation entitled *Educational Guidance* was published in 1914. Kelley's purpose was to develop a more scientific method of classifying high school students. He was interested in making it possible "to determine, before courses in high school are taken, what the probable ability of the pupil in question will be in them."¹ In using the term "educational guidance" he was thinking in terms of aiding the pupil in the selection of high school subjects. He looked upon this as a basis for later vocational guidance. The term "moral guidance" appears to have found its way into educational literature in 1912 when Jesse B. Davis presented before the National Education Association a paper entitled "Vocational and Moral Guidance through English Composition."² In more recent years the terms "civic," "social," "health," "recreational," "religious," and "leadership" as applied to guidance have come into use. All these terms, having grown out of vocational guidance, can be understood better if there is a clear understanding of the original term.

In the second place, as will appear more clearly in later pages, vocational guidance has become a more sharply defined concept in the public mind than has any of the other kinds of guidance. One has only to read the various books that include the word "guidance" in their titles, or to examine what is done under the name of guidance in city school systems, to be convinced of this. Possibly this is partly because vocational guidance is a simpler concept. Also, the National Vocational Guidance Association has defined this term with great care. Whatever may be the reason, the mere fact that it is a more sharply defined and generally understood concept makes vocational guidance a good point of departure in considering other kinds of guidance.

In the third place, vocational guidance is concerned with a compelling interest in the lives of all. There has been a tendency

¹ TRUMAN L. KELLEY, *Educational Guidance*, p. 4, Teachers College Contributions to Education, No. 71, New York: Teachers College, Columbia University, 1914.

² JESSE B. DAVIS, "Vocational and Moral Guidance through English Composition," *Journal of Proceedings and Addresses*, National Education Association, 1912, L, 713-718.

on the part of many writers and school administrators, under the spell of that old saying, "Making a life is more important than making a living," to treat vocational guidance as on a somewhat lower level than educational and certain other kinds of guidance, which they think of as concerned with making a life. They seem to forget that making a life and making a living are absolutely inseparable for most mortals and that vocational success is far more than making a living. An individual does not make a life in a vacuum. A great part of his waking hours is spent in his vocation. Usually his major contribution to society is made through his vocation, and many of his greatest personal satisfactions should come to him, and do if his vocation is suitable, from the same source. His ability to make valuable contributions to society outside of so-called "working" hours, and also to find personal satisfaction, is conditioned by his vocational success and his vocational environment. His thinking, behavior, and associations are similarly conditioned. In a very real sense he chooses a way of life when he chooses a vocation. One might as well talk of flying in a vacuum as of making a life independently of one's vocation. A supporting element is necessary in both cases. Changing the figure, "One's job is the watershed down which the rest of one's life tends to flow."¹ Because of its stronger appeal and greater human interest, vocational guidance may well receive consideration first.

DEFINITION OF VOCATIONAL GUIDANCE

According to the principles adopted by the National Vocational Guidance Association in 1921, revised in 1924, in 1930, and again in 1937,

Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon and progress in it. It is concerned primarily with helping individuals make decisions and choices involved in planning a future and building a career—decisions and choices necessary in effecting satisfactory vocational adjustment.²

¹ ROBERT S. LYND and HELEN M. LYND, *Middletown in Transition*, p. 7, New York: Harcourt, Brace & Company, Inc., 1937.

² "The Principles and Practices of Educational and Vocational Guidance," Report of the Committee of the National Vocational Guidance Association, *Occupations: The Vocational Guidance Magazine*, XV (May, 1937), 772-778.

It is worth noting that this is not the definition of a single writer on the subject. Neither is it a hastily framed statement of a committee. It is a concept that has been accepted by a national organization in the field concerned after careful study and discussion by committees covering a period of more than fifteen years.

Evidence that this concept of vocational guidance was not hastily arrived at is found in a comparison of the above statement with that adopted by the same association in 1924; namely, "Vocational guidance is the giving of information, experience and advice in regard to choosing an occupation, preparing for it, entering it, and progressing in it." The author called attention some years ago to the striking difference between these two statements, similar as they may seem on the surface. He said:

The one defines vocational guidance as doing something to the individual—*giving* him "information, experience and advice in regard to choosing an occupation." . . . The other places the emphasis upon assisting the individual to *do something for himself*—"choose an occupation. . . ."¹

He might have added that in the later statement vocational guidance is defined as a *process*, while in the earlier statement attention is focused upon the *methods* by which the process is carried on. In this book the 1937 definition is accepted as the best available, with its emphasis upon vocational guidance as a "process of assisting the individual" to *do for himself* certain definite things pertaining to his vocation.

Some years ago one writer cleverly referred to vocational guidance as "seeing through Johnny and seeing Johnny through." If one accepts the 1937 definition of the National Vocational Guidance Association, it is at once evident that this clever statement is inadequate. It carries much the same idea as the 1924 definition. A better way to express it in similar language would be: Vocational guidance is helping Johnny to see through himself and to see himself through.

Fundamental to this conception of vocational guidance is recognition of the fact that two sets of differences are involved. On the one hand are the well-known differences among individuals—differences in physical characteristics, general intelli-

¹ GEORGE E. MYERS, "A Quarter Century of Vocational Guidance," *Occupations: The Vocational Guidance Magazine*, XII (May, 1934), 35.

gence, special aptitudes, special limitations, personality traits, and the like. On the other hand are differences in the requirements and opportunities of hundreds, even thousands, of occupations. The problem of vocational guidance is that of assisting an individual who possesses certain assets, liabilities, and possibilities to select from these many occupations one that is suited to himself and then to aid him in preparing for it, entering upon, and progressing in it. If all individuals were alike this problem would not exist, for no one would be better suited to this or that occupation than would all others. If all occupations were alike, in other words if there were only one occupational goal for all, there would again be no question of choice and therefore no question of vocational guidance. In primitive society this situation was approximated as far as occupations were concerned and the more nearly it was approximated the less was the need for vocational guidance. It was only as different vocational goals emerged that this need arose. And the need became more urgent as the number of such goals multiplied.

Also, it should be observed, these two sets of differences—essential elements of the vocational guidance situation—are present after as well as before the choice of a vocation has been made. There are, of course, differences among those who select the same vocation. On the other hand, there are different ways of obtaining the needed preparation for it and different places offering different opportunities and requirements for this preparation. One may prepare for the machinist's trade by serving as an apprentice, by working as a helper, or by attending a trade school. There are class A and class B medical schools with important differences in entrance and graduation requirements. There are, also, different places with different opportunities and requirements where one may enter upon the regular work of his occupation, some favorable to one type of individual and others favorable to another type. Once suitably employed in an occupation chosen wisely and prepared for under the most favorable conditions according to one's ability, there are different ways of making progress in it—ways to which the individual's attention needs to be called and among which he should choose with care according to his own peculiar assets and liabilities.

It should be clear from the preceding paragraphs that the process of vocational guidance, like the process of education, con-

tinues in the life of the individual over a long period of time. It is not a single act or a brief series of acts involved in telling one what vocation he should follow, as some seem to think. It includes acquainting the individual with a wide range of information concerning himself and concerning occupations, by means and methods that will be considered later. It includes helping the individual to work out for himself an adaptable vocational plan and to proceed in accordance with that plan. It includes aiding the individual to acquire a method of procedure in dealing with his vocational problems that will enable him to make wise changes in his vocational plan at any time in his life when changes become necessary or desirable.

As a school enterprise it begins at that point in the individual's life when he finds it necessary to make choices that have definite significance for his future vocation. For the normal child this is usually in the seventh grade when the necessity arises for choosing among the general, the commercial, and the practical arts curriculums. It should continue as a school enterprise until the individual is functioning in a wisely chosen vocation with a degree of success commensurate with his abilities. This may mean until a year or more after completion of four years of professional education beyond college.

Nor is organized vocational guidance, any more than organized education, limited to educational institutions. Many social agencies of varied character and aims are making important contributions to this process in the lives of youth attending school. The home is probably the most important of these social agencies. The Boy Scouts of America, with 100 or more different routes leading to the merit badge, performs a valuable vocational guidance service for many of its members. Certain radio programs have been planned definitely and cleverly for the same purpose. Men's and women's service clubs are giving real assistance to school programs of vocational guidance. And for those who have left school such organizations as the Civilian Conservation Corps, the National Youth Administration, the U.S. Bureau of Employment Security, state employment services, and adult educational programs are contributing in ever-increasing degree to vocational guidance for youth and adults.

In organized form vocational guidance may well come to have an important place in the entire working life of the individual, as

it already has in unorganized form. And, it may be observed, the process of vocational guidance, like the process of education, goes on in an unorganized manner in the life of every individual, whether he is conscious of it or not. It is well known that many have been aided in making vocational decisions, sometimes fortunate and sometimes unfortunate, by purely incidental influences, such as a chance remark of a friend, the whim of a relative, ease of getting a particular job, quick earnings, and the like. In fact, those in charge of organized vocational guidance find it necessary constantly to be alert to these unconscious influences that lead so often to ill-considered vocational plans. In other words, organized vocational guidance, in connection with the schools or with other social agencies, is society's effort to do for the individual in a systematic and well-considered manner what otherwise would be left to chance influences, as it has been in the past history of the human race.

Thus understood, the term "vocational guidance" may well be looked upon as part of the great conservation movement which has claimed so much attention in this country during recent decades. Much emphasis has been placed on conservation of natural resources—forests, coal, oil, gas, soil fertility, water power, bird and wild animal life—and huge sums have been spent by the United States government on conservation projects of these types. Attention has been given, also, to conservation of human health, especially child health. Witness the work of the White House Conference on Child Health and Protection, child labor legislation aimed largely at the dangers of such labor to the health and normal growth of children, and the wide attention given in recent years to correcting the defects of crippled children. Vocational guidance is fundamentally an effort to conserve the priceless native capacities of youth and the costly training provided for youth in the schools. It seeks to conserve these richest of all human resources by aiding the individual to invest and use them where they will bring greatest satisfaction and success to himself and greatest benefit to society.

RELATION OF VOCATIONAL GUIDANCE TO VOCATIONAL EDUCATION

It should be clear from what has been said that vocational guidance and vocational education, though closely related, are not to be confused. The latter means preparation for a vocation

after it has been chosen in some manner, wisely or unwisely. The former involves, among other things, assistance in choosing both the vocation and a plan of preparation for it before the preparation begins. The former serves to bring the individual into vocational preparation under the most favorable conditions possible. Vocational education without vocational guidance is much like trying to make an automobile crankshaft out of any bar of metal that comes handy without first determining whether it is suitable for the purpose. Vocational guidance without vocational education is like selecting with great care a bar of steel suitable for a crankshaft without providing proper facilities for subjecting it to the processes of forming, tempering, and gauging necessary for the purpose. Both vocational guidance and vocational education are necessary to a successful transfer from school to working life.

Differing as these two processes do, they are nevertheless so intimately related that in providing vocational guidance, especially by means of exploratory experiences, a limited amount of vocational education may be given. This is true, for example, when these experiences are in the work of a machinist and the individual later prepares for the machinist's occupation. On the other hand, it often happens that as preparation for a particular vocation proceeds, either the individual's choice is thoroughly confirmed or he comes to the conclusion that he has chosen unwisely and should change to some other vocation. In other words, activities provided for purposes of vocational preparation serve as vocational exploratory experiences, either confirming or invalidating a vocational choice already made, and thus serving a vocational guidance purpose. Whether a particular school activity shall be considered the one or the other depends upon its primary or controlling purpose. If its controlling purpose is to aid in selecting a vocation, in planning preparation for it, or in entering upon or progressing in it, then that activity is obviously vocational guidance. If the controlling purpose is to prepare for a chosen vocation, then it is vocational education.

Perhaps it should be added that a few writers have treated vocational education as part of the vocational guidance process—that part referred to in the definition as “assisting the individual to . . . prepare for” his vocation. There is much to be said in

support of this view, since preparation for the vocation is an intermediate step between choosing it and entering upon it. Most authorities, however, interpret this assistance as including only planning the preparation and not the preparation itself.

RELATION OF VOCATIONAL GUIDANCE TO AN ORGANIZED EDUCATIONAL PROGRAM

The place that vocational guidance occupies in a program of public education will be discussed at length later. It is important, however, that the reader should understand early that the author of this book looks upon vocational guidance as an integral part of an organized educational program and not as something apart from education that is being wished upon the schools by a group of enthusiasts because there is no other agency to handle it. This view was expressed by the author as long ago as 1924, when he said:

Out of the fog of discussion that for years has surrounded the subject . . . it has become increasingly clear that helping the youth to obtain reliable and significant information upon which to base a choice of occupation, directing him in his preparation, helping him to find a suitable opportunity to begin work in the occupation of his choice, and giving him additional assistance as needed during the period of adjustment and further training after employment begins, are just as truly educational service as teaching the same youth history or mathematics. It may be added that the former service is likely to have a far more vital bearing upon his satisfaction in life and his contribution to society than the latter. This conception of vocational guidance as an integral part of organized education, and not as something added on, is fundamental. Acceptance or rejection of it affects the budget, the plan of organization and administration, and the methods of carrying on the work. Orderly, systematic progress in vocational guidance commensurate with its importance is dependent in large measure upon the extent to which this fundamental conception prevails.¹

However, this should not be interpreted as meaning that vocational guidance is synonymous with education, as will appear more clearly in Chap. III.

¹ GEORGE E. MYERS, "A Critical Review of Present Developments in Vocational Guidance with Special Reference to Future Prospects," *The Vocational Guidance Magazine*, II (March, 1924), 139.

VOCATIONAL GUIDANCE A SPECIALIZED FUNCTION

Enough has been said already to indicate that, while vocational guidance is properly an integral part of an educational program, it is at the same time a specialized part of that program. Its function is different from those of teaching and other school activities. As a specialized function it is characterized by a body of knowledge and techniques of its own. Thus it requires special preparation just as truly as does the teaching of mathematics or the work of the school physician. True, all teachers have certain responsibilities in relation to vocational guidance, just as they have in relation to the health problem of the school in which they work; but beyond this there is needed a specialized vocational guidance service for which special preparation is necessary.

The place of vocational guidance in an organized educational program and its specialized character should become clearer as the discussion presented in this book proceeds.

SUMMARY

A clear understanding of the meaning of the term "vocational guidance" is a first essential in considering its relationship, principles, and techniques. "Vocational" was first among the many qualifying adjectives that have come to be applied to the term guidance in the literature of modern education. Vocational guidance is a more sharply defined concept in the public mind than is any other form of guidance. It is concerned with a compelling interest in the lives of all since one's entire way of life is conditioned to a high degree by his occupation.

The standard definition of the term reads: "Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon, and progress in it." It is concerned not with doing things for the individual but with helping the individual to do certain things for himself. It is a *process* rather than merely a body of *methods* by which the process is carried on.

Two *sets of differences* are involved in vocational guidance: differences among individuals and differences among occupations. If either of these two sets were absent no vocational guidance situation could exist. Since both are present the opportunity

and the necessity arise for choice on the part of the individual according to his peculiar personal characteristics. This opportunity for choice is present also in connection with preparation for, entrance upon, and progress in the chosen occupation. Vocational guidance is, therefore, a long-continued process. Organized assistance of this kind, begun in the school, should function as needed throughout the working life of the individual. It is a form of human conservation which is aimed at wise use by the individual of priceless native capacity and the results of costly training provided by the schools for the good of the individual and of society. Basic to effective vocational education, vocational guidance is an integral part of the educational program but a specialized part for which special provision is necessary.

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CHAPTER II

OTHER KINDS OF GUIDANCE

Several kinds of guidance besides vocational were mentioned in the previous chapter. The list was not complete. Nor is there agreement among authorities as to just what should be included in the list.

Proctor, in addition to vocational and educational guidance, discusses under separate chapter headings four other kinds. His list includes the following:

1. Educational guidance.
2. Vocational guidance.
3. Guidance in social and civic activities.
4. Guidance in health and physical activities.
5. Guidance in the worthy use of leisure time.
6. Guidance in character-building activities.¹

Jones, in the 1930 edition of his book, lists six phases of guidance, as he calls them:

1. Vocational guidance.
2. Course, curriculum, and school guidance.
3. Civic and moral guidance.
4. Leisure time, avocational, or cultural guidance.
5. Social guidance.
6. Leadership guidance.²

In the revised edition of his book Jones reduces this list to four, as follows:

1. Course, curriculum, and school guidance—"educational guidance."
2. Vocational guidance.
3. Leisure-time guidance.
4. Leadership guidance.³

¹ WILLIAM MARTIN PROCTOR, *Educational and Vocational Guidance*, Boston: Houghton Mifflin Company, 1925.

² ARTHUR J. JONES, *Principles of Guidance*, 1st ed., p. 30, New York: McGraw-Hill Book Company, Inc., 1930.

³ JONES, *op. cit.*, 2d ed., p. 47, 1934.

Koos and Kefauver mention five kinds of guidance, though giving most of their attention to educational and vocational. "Other aspects of life," they say, "in which guidance must be provided in order to make it sufficiently inclusive are the *recreational* aspects, *health*, and that broad and composite aspect that may be designated as *civic-social-moral*."¹ Their list, therefore, includes the following:

1. Educational guidance.
2. Vocational guidance.
3. Recreational guidance.
4. Health guidance.
5. Civic-social-moral guidance.

Brewer expands the number of items in the list to ten:

1. Educational guidance.
2. Vocational guidance.
3. Religious guidance.
4. Guidance "for home relationships."
5. Guidance "for citizenship."
6. Guidance "for leisure and recreation."
7. Guidance "in personal well-being."
8. Guidance "in right-doing."
9. Guidance "in thoughtfulness and cooperation."
10. Guidance "in wholesome and cultural action."²

Paterson, Schneider, and Williamson mention five kinds of guidance, as follows:

1. Educational guidance.
2. Vocational guidance.
3. Personal guidance (including social, emotional, and leisure-time guidance).
4. Health guidance.
5. Economic guidance.³

Certain writers and speakers have referred to still other kinds of guidance, among them "personality guidance" and "mental guidance." One speaker on the subject said recently: "There

¹ LEONARD V. KOOS and GRAYSON N. KEFAUVER, *Guidance in Secondary Schools*, p. 15, New York: The Macmillan Company, 1932.

² JOHN M. BREWER, *Education as Guidance*, New York: The Macmillan Company, 1932.

³ DONALD G. PATERSON, GWENDOLEN G. SCHNEIDLER, and EDMUND G. WILLIAMSON, *Student Guidance Techniques*, p. 3, New York: McGraw-Hill Book Company, Inc., 1938.

are at least seventeen different kinds of guidance," though he did not proceed to name them nor to support his statement. Indeed, at a meeting of collegiate registrars some years ago one paper bore the title "Fifty-seven Varieties of Guidance."¹

Agreement and disagreement among authorities. Careful examination of the lists presented above will convince one that there is a considerable degree of agreement as to kinds of guidance. Vocational and educational guidance appear in all of the lists and are generally recognized in the other literature of the field, though not all writers use the term "educational guidance" in the same sense. Recreational guidance, also, is given a place in each list, either under its own name or under the less definite term "leisure-time" guidance.

On the other hand, no small amount of disagreement is evident. Health guidance does not appear on either of Jones's lists, though it is found in some form on all of the others. Civic, social, and moral guidance are omitted from Jones's later list though they appear on his earlier one and in varied forms on the others. Jones alone includes leadership guidance. Brewer alone mentions religious guidance, guidance "for home relationships," guidance "in thoughtfulness and cooperation," and guidance "in wholesome and cultural action."

Moreover, it must be kept in mind that the mere fact of agreement among several authorities in the same field is not final evidence that they are right. At one time astronomers were agreed upon the geocentric conception of the universe.

Vocational guidance as a frame of reference. In order to arrive at a satisfactory conclusion concerning what kinds of guidance should be recognized and provided for in the schools, it is desirable to have some frame of reference with which each proposed kind in turn may be compared.

Vocational guidance as defined in the previous chapter constitutes just such a frame of reference. It was noted that, according to that definition, two sets of differences are involved, in fact are fundamental, in vocational guidance—differences among individuals and differences among the many occupations from which each individual must make his choice. Only when roads branch off the common highway pursued by all, each

¹ MAX MCCONN, "Fifty-seven Varieties of Guidance," *Bulletin of the American Association of Collegiate Registrars*, III (April, 1928), 351-362.

branch leading toward a different occupational goal and perhaps later branching again and again toward more specific goals, necessitating choice, does the vocational guidance situation exist. Any act or procedure which is for the definite purpose of aiding the individual to make a wise choice when this situation arises is part of the vocational guidance process, whether it takes place at the time of the choice or years earlier. Usually the choice is the result of an accumulation of influences of various kinds often covering a considerable period of years. Here is something definite with which each of the other kinds of guidance may be compared.

EDUCATIONAL GUIDANCE

Educational guidance situations are numerous. Does a similar situation exist in the case of what is called "educational" guidance? And is there need for a similar process? These questions must be answered in the affirmative.

The first of the two sets of differences, those among individuals, will, both here and in the future, be taken for granted. The second set consists of the varied subjects, curriculums, schools, and extracurricular activities among which the individual pupil may—rather, must—choose. In the junior high school he must decide which of three or four curriculums he will pursue. When he finishes junior high school he must decide whether to go on to a higher school and, if so, whether it shall be to an academic, a commercial, a technical, a trade, or other school. Upon entrance to the higher school, or soon thereafter, he must again choose among different curriculums and often among particular subjects in the curriculum selected. The same necessity for making choices among the educational opportunities confronts him when he enters college, on his way through college, and in the professional school, if he continues his formal education that far. The essential features of a guidance situation affecting the education of the individual are present and the term "educational guidance" is fully justified. However, for the sake of avoiding confusion there is much to be said in favor of using the longer term "course, curriculum, and school guidance," as Jones does in the first edition of his *Principles of Guidance*,¹ to indicate

¹ JONES, *op. cit.*, 1st ed.

the form of guidance here described. It is in this sense that the term "educational guidance" will be used in this book.

Educational guidance is often influenced by vocational considerations. At this point it is well to note that many of the educational choices which the individual must make are strongly influenced by vocational considerations. This is true of the choice among the curriculums of the junior high school in so far as this choice is based upon the desire to discover by means of exploratory experiences whether the individual has aptitudes for one vocational field or another. It is still more true when choices are made at the senior high school, college, or professional school level for prevocational (prelaw or premedical course, for example), or definitely vocational preparatory purposes. Obviously it is impossible to separate completely educational from vocational guidance situations at these times. Usually, however, either the educational or the vocational purpose dominates the situation and thus is determined which of the two kinds of guidance the service rendered should be called. Brewer illustrates this well with the case of a girl who is counseled in reference to choosing biology as a high school subject in order to enter later a school for nurses. After pointing out that in this situation educational and vocational guidance are offered simultaneously, he says:

Any item of counsel given should be classified by its controlling motive—by the goal to which it points. If our chief interest in the case used in the above illustration is in the nursing career we may call the guidance vocational; if it is in rounding out the educational career and securing success in it the counsel may be called educational.¹

Educational guidance is sometimes without vocational implications. On the other hand, there are situations where the problem is so definitely that of educational guidance that there is no reason to consider any other name for it, with the understanding that the term really means course, curriculum, and school guidance. This is true when, whatever choice is made, the prime consideration is the general development of the individual. Pupils at the beginning of the twelfth grade may find it necessary to choose whether to go on with Latin, French, English, chemistry, or history, or to take economics or sociology for purposes of further-

¹ BREWER, *op. cit.*, p. 113.

ing their education regardless of their vocational plans. The proper answer to the question will differ for different members of the class depending upon previous experiences, present interests, and future educational possibilities. The choice is clearly an educational choice and the problem of aiding pupils to arrive at wise decisions is definitely one of educational guidance.

Meaning of educational guidance is limited. As thus defined educational guidance is something very different from what Brewer means by the term when he says:

Educational guidance may be defined as a conscious effort to assist in the intellectual growth of an individual. . . . Anything that has to do with instruction or with learning may come under the term educational guidance.¹

Again in his later book Brewer expresses the same point of view when, more specifically, he indicates that educational guidance includes guidance in the following matters:

How to study; using the common tools of learning; adjusting school life to other activities; regularly attending on school and to school tasks; learning to speak, interview, compose in writing, take examinations, and use libraries; and making the important educational decisions at each of the many forks in the road.²

As he defines the term, Brewer seems to include under educational guidance all of the assistance which is given to boys and girls in making proper progress in their school work. Teaching, discipline, school routine, and various other activities appear to be included. In other words, he seems to identify educational guidance with organized education itself.

The difficulty with Brewer as quoted above seems to be that he ignores, for the time being at least, the second of the two sets of differences which characterize an educational guidance situation—the various educational roads leading to different goals, which are open to the individual and among which he must choose. According to Brewer, educational guidance is needed when all pupils of a class are pursuing a common road toward a common goal, just as truly as when the necessity for choice among different

¹ JOHN M. BREWER, *The Vocational Guidance Movement*, p. 14, New York: The Macmillan Company, 1918.

² JOHN M. BREWER, *Education as Guidance*, p. 114, New York: The Macmillan Company, 1932.

roads leading to different goals arises. In the elementary school, for example, all pupils are traveling on a common highway toward the common goal of good citizenship and good consumership, which society insists are needed by all regardless of differences among them in personal characteristics and in future occupational goals.

Recognizing clearly the first set of differences, those among individual pupils, and impressed by the fact that these have been given scant attention in the schools, Brewer maintains that helping the individual to make progress along this common highway *by methods suited to his own needs* is educational guidance. As a matter of fact, this is nothing else than the age-old process of *organized education* by means and methods adapted to individual needs. It is well known that some pupils will travel faster and some go farther than others along this common highway because of individual differences. The school's task is to help each one travel as fast and go as far as is consistent with his abilities. In order to accomplish this task some schools have undertaken to group their children according to ability, to provide different kinds of learning material in the same field for pupils of differing ability, to individualize instruction as fully as possible. Brewer does well to stress these efforts of the schools, as others have done. In fact, the entire issue here is the old issue of the *child centered* school as opposed to the *subject centered* school as a means of meeting the common needs of all.¹

Educational guidance is a process concerned with bringing about between an individual pupil with his distinctive characteristics on the one hand, and *differing groups* of opportunities and requirements on the other, a favorable setting for the individual's development or education. If there is a single group of opportunities and requirements, as is the case with a fixed curriculum,

¹ In 1906 the author published a paper in which the following statement was made: "The most important advantage of the genetic point of view is its effect upon the teacher himself, once he really gets it. He looks upon the same school equipment, the same daily routine, the same boys and girls as before, but his attitude toward them is as different as was the astronomer's attitude toward the heavens when he passed from the geocentric to the heliocentric conception of the solar system. No longer ability to pass examinations, nor discipline, nor athletic standing, but *the child himself becomes the central object of the school.*" GEORGE E. MYERS, "Moral Training in the School," *Pedagogical Seminary*, XIII (December, 1906), 452.

the problem is simply one of *education by the best methods possible in a setting already determined* and not one of educational guidance.

Thus defined, educational guidance cannot be confused with organized education. One is concerned with aiding the individual to find the most favorable setting or environment for his personal development; the other, with aiding him to obtain the maximum desirable development from that environment, once he is in it.

Educational guidance is not teaching. Also, the meaning of educational guidance as presented in this chapter differs from what Jones means by the general term guidance when he says:

Whenever in the learning process the teacher *assists the child to learn*, guidance is present . . . Choices in methods [of learning] are often, if not always, possible. The efficient teacher is continually trying to help the pupil find the method that is best suited to him. Such assistance is guidance . . . The best description of the real teacher, then, is that he is the guide, the personal conductor, in the process of learning. Teaching conceived of as assisting the pupil to learn is in all essentials guidance.¹

Again, Jones says:

Obviously, *even teaching, which is guidance*, can be effectively done only by the cooperation of all forces of the school and the community.²

While Jones seems, in these quotations, to recognize the two sets of differences which are essential to an educational guidance situation, he really loses sight of the second set. While he speaks of "methods of learning" among which "the efficient teacher is continually trying to help the pupil find the method that is best suited to him," he is really dealing with methods of teaching among which the teacher selects according to the needs and abilities of individual pupils. In an actual teaching situation the teacher does not say to his class, either literally or figuratively: "Here are five different ways of learning this particular lesson. I will help each of you to choose the method best suited to your needs." Rather does he say to himself: "Here are five methods of teaching this lesson. Method Number 1 will be best for most of the class. But Method Number 2 will be best for

¹ JONES, *op. cit.*, p. 39.

² *Ibid.*, p. 397.

John, Number 3 for Mary, Number 4 for William, and Number 5 for Lucy."

In elementary education, in other words, the teacher's job is not that of helping pupils to select among different routes to the same goal. It is rather that of helping each pupil to make as great and as rapid progress as possible along a common route toward the same goal. One pupil leaps forward with little help and has time to explore some of the interesting territory lying along the road. Another moves with slow but steady stride, arriving at a given milepost in the same time as the first but with a less rich and complete knowledge of the route traveled. Still another, by means of a cane or crutch and much encouragement supplied by the teacher, and by dint of his own spasmodic efforts, arrives at the same milestone one or two years later. In each case the teacher's task is that of helping the pupil to progress along a single well-marked highway according to his ability.

When Hopkins says: "The emerging school theory recognizes that guidance is an aspect of all proper learning and must therefore be centered in the intelligent management of the learning situation,"¹ his meaning seems to be substantially the same as that of Jones. Hopkins's statement appears to identify guidance with what has long been thought of as just good teaching—assisting the pupil to obtain the maximum of desired development from learning situations.

Educational guidance is not adjustment of teaching to individual needs. When Proctor defines educational guidance as

. . . consisting of all such school activities as have for their purpose the guidance of pupils in their choice of schools, courses of study or curricula, as well as all activities connected with the discovery of individual differences and the adjustment of teaching methods and content of subjects to the needs and abilities of children,²

he recognizes the two sets of differences in the first part of his definition and completely ignores the second set in the last part. In the first part he deals definitely with educational guidance in a manner that is easily understandable. In the last part where he speaks of "activities connected with . . . the adjustment of

¹ L. THOMAS HOPKINS, "The Current Educational Awakening," *Democracy and the Curriculum*, Third Yearbook of the John Dewey Society, p. 264, New York: D. Appleton-Century Company, Inc., 1939.

² PROCTOR, *op. cit.*, p. 132.

teaching methods and content of subjects to the needs and abilities of children" he deals equally definitely with what has long been considered teaching, in the best sense of that term. And these two very different ideas are tied together by means of a third idea; namely, "activities connected with discovery of individual differences," which is fundamental to both but not all of either. It appears that Proctor does not here recognize the second set of differences, which introduces the necessity for choice, as essential to the situation if it is to bear the name "educational guidance."

Confusion exists between educational guidance and education.

Illustrations of confused and hazy thinking on the relations between educational guidance and organized education itself might be multiplied indefinitely. At a recent meeting of the National Vocational Guidance Association one speaker made the statement that "all education is a type of guidance," while another referred to guidance as "a more personal form of education." At a state guidance conference recently held one speaker declared with much emphasis: "Education is guidance and guidance is education."

If one were to go through most of the programs of educational guidance that have been set up in city school systems he would find conditions much the same in this respect as in the statements quoted above. Koos and Kefauver call attention to this in their discussion on delimiting the scope of guidance.¹ Many activities essential to the successful operation of a school system are related to educational or vocational guidance but are not in themselves either of these forms of guidance. They are rather, and many of them long have been, parts of the organized educational program itself, or of pupil personnel work in its broader aspects as discussed in the next chapter. For example, a case of discipline may bring to light information of great importance in connection with the educational or vocational guidance of the individual concerned; but the immediate problem presented is primarily one of civic, social, moral, or health education by methods that take careful account of individual differences. The job to be done is to aid in the development of the individual with reference to common standards of conduct. The methods used

¹ KOOS and KEFAUVER, *op. cit.*, pp. 17-22.

in doing the job are important, to be sure, but nothing is gained by confusing them with educational guidance.

Indeed, the confusion between educational guidance and education itself seems to arise out of failure to differentiate between the *process*, which is educational guidance (course, curriculum, and school guidance), and certain *methods* and *techniques* by which the process of education itself is carried forward. Some of these methods and techniques have characterized vocational guidance from the beginning, and have come to be associated with that term.

When the term "educational guidance" came into general use the tendency was to apply it to these methods and techniques as they were used in the process of education, rather than to restrict it to the process of providing the individual with the same kind of assistance in making his educational plans that is afforded him by vocational guidance in making his vocational plans. A good example of this tendency to confuse the process of educational guidance with methods is found in the following quotation from one of the most recent books in the field, especially in its first sentence:

Guidance is the methodology by means of which educators' professed interest in individualization can be effectively translated into practice. It offers methods for diagnosing the abilities, interests, background, and needs of the individual students; it offers methods of relating such findings to the individual's life adjustment; and, finally, it offers methods of selecting, from available curriculums, that individual curriculum most suited for the student. In addition to selecting such an individual curriculum, guidance must follow up the student to see that he makes an adequate adjustment to his training program.¹

In reality educational guidance is not a methodology but is rather the process of helping the individual by means of various methods to find his way into the most favorable environment for his development, as will appear more clearly in the next chapter.

An expression that has added to the confusion may well be noted here, namely, "the guidance attitude in teaching." This expression seems to carry the idea of a friendly, helpful spirit

¹ SHIRLEY A. HAMRIN and CLIFFORD E. ERICKSON, *Guidance in the Secondary School*, p. 17, New York: D. Appleton-Century Company, Inc., 1939.

on the part of the teacher and to imply that he is using some of the methods and techniques that have characterized vocational guidance from the beginning. Desirable as such an attitude is, it should not be thought of either as educational guidance or as a substitute for it. A teaching attitude and teaching methods are implied rather than any activity or process that may properly be called educational guidance.

Educational guidance is a process. The crux of the whole matter is that *educational guidance is a process*, not a method or set of methods. It is a process of aiding the individual to place himself continually in the most favorable setting or environment for his education, not methods of promoting that education once he is in such environment. It is based upon differences in educational opportunities and requirements as well as upon differences among individuals. It is concerned with helping the individual to plan wisely his educational program and to put himself in position to carry forward successfully that program along lines that society considers wholesome both for itself and for him.

RECREATIONAL GUIDANCE

Meaning and scope of the term. It has been noted that the term "recreational guidance" is used to describe a form of guidance differing from vocational and educational. Some writers use the term "leisure-time" in preference to "recreational," usually including a wider range of activities under this term. Proctor puts it "guidance in the worthy use of leisure time." Brewer calls it "guidance for leisure and recreation." Jones prefers just "leisure-time guidance," though in his earlier edition he framed it "leisure time, avocational, or cultural guidance."

For several reasons the term "recreational guidance" is preferable. It is more specific. It refers to a group of activities, as do vocational and educational, rather than to a division of one's time. (It would be as logical to say "working-time" or "school-time" guidance as "leisure-time" guidance!) It harmonizes better with vocational and educational guidance. Also, guidance in connection with certain other activities than the recreational which claim part of one's leisure time deserves special recognition and consideration.

It is important, however, that there be a common understanding of the word "recreation." In the discussion which follows it is used, and this use appears to be justified by common practice, to include a wide range of activities. Among these are a great variety of physical activities—golf, tennis, baseball, football, hockey, hiking, hunting, fishing, skating, swimming, etc.; activities of a social type—parties, dances, bridge; many others of an entertainment type—theaters, movies, concerts, operas, radio programs; still others in great variety of the hobby or avocational type—collecting, constructing, growing, picturing, exploring, and the like. Reading, also, is often considered a recreation though as engaged in by many individuals it serves educational or vocational purposes to a greater extent.

Recreational guidance valid. With this understanding of recreations it should be clear at once that the term "recreational guidance" is fully justified. There are a great many different kinds of recreations among which differing individuals must choose, on some basis or other, which will claim part of their leisure time. If the choices made are to prove wise ones both the characteristics of the individual and the opportunities and requirements of particular recreations need to be considered. Thus the two sets of differences discussed earlier as criteria of a guidance situation are present and a definite need for assistance in making suitable recreational choices exists.¹ In fact, the problem with which the individual is confronted is not only that of choosing suitable recreations among the many available to him. It includes, also, apportionment of time among the different recreations chosen, and readjustment both of choices and of apportionment of time as life advances. An adaptable recreational plan is needed by each individual which takes account of his

¹ Anyone who doubts the existence of this need should ask a dozen friends what recreations they engage in and how much of their time is given to each. In 1934 the author made a study of more than 3,000 recent graduates of the University of Michigan. He found that in some cases the recreations were wholly physical, in other cases wholly social, and in still other cases almost wholly entertainment. Nearly 1.5 per cent reported no time at all spent in recreation other than reading, while more than 17 per cent reported an average of 19 or more hours per week devoted to other types of recreation than reading. One young woman teacher reported 12 hours per week of reading and 45 hours of theater, bridge, dancing, and concerts. GEORGE E. MYERS, "Michigan Graduates during the Depression," *Michigan Alumnus Quarterly Review*, XLII (Jan. 4, 1936), 43, 45.

health and physique, his occupation, his temperament, and other personal factors as well as of the many kinds of recreational activities available.

Recreational guidance different from recreational education. If this conception of recreational guidance is once grasped by the reader it should be easy to keep the meaning of this term distinct from that of recreational education just as vocational guidance is distinct from, though closely related to, vocational education. Recreational guidance is concerned with helping the individual to find his way into suitable recreations. It involves aid in choosing the recreations, in preparing for (*i.e.*, planning his preparation for), entering upon, and progressing in them. On the other hand, recreational education is concerned on society's side with helping the individual to make the necessary preparation for satisfactory participation in the activities which make up these recreations, and on the individual's side with his personal development which accompanies this preparation and participation. Recreational guidance is thus, in its field, closely analogous to vocational guidance in the field of vocations. In both cases there is choice, there is preparation either before or in connection with participation, and there is participation.

This does not mean that education in the sense of individual development goes forward only in the second of these steps. Education is present in the first step, for example, in exploratory experiences, in counseling, and in other activities. It is present in the third step, since participation in any activity contributes something to the development of the participating individual. But it dominates and gives its name to the second step. Nor does it mean that recreational guidance in some aspect or other does not have a place in all three steps. It dominates the first step. It is present in the second, since when one is preparing for a definite activity he sometimes discovers a dislike for it and changes to another. It is present also in the third step, since questions of readjustment arise here.

Someone may say that this is an admission that education and guidance are, after all, synonymous. Not at all. They march side by side at times and tandem at times, now one leading and now the other, but they are distinct entities just as truly as are two individuals. The relations between the two will appear more clearly in the next chapter.

"CIVIC" GUIDANCE

A fourth form of guidance on the lists mentioned earlier in this chapter is "civic" guidance, though this is often combined with "social" or "moral" or both. Proctor calls it "guidance in social and civic activities." Jones gives it the name "civic and moral guidance" in the first edition of his *Principles of Guidance* but omits it from the second edition except as it may occur in educational or "leisure-time" guidance. Brewer gives it the name "guidance for citizenship." Koos and Kefauver present the combination term "civic-social-moral guidance." In the discussion that follows it seems wise for the sake of clearness to deal with the term "civic guidance" by itself, reserving "social guidance" and "moral guidance" for later consideration.

Civic guidance or civic education, which? Civic guidance would seem to mean, unless the word "guidance" is used differently here than when combined with the word "vocational," "educational," or "recreational," the process of aiding the individual to choose, prepare for, enter upon, and progress in civic activities that are suited to his personal aptitudes, interests, and other characteristics. But most of the civic activities in which people are expected to engage are the same for all members of the community—for lawyer Jones and plumber Smith and farmer Brown. The obligation rests equally upon all to observe the laws, to show respect for constituted authority, to live peaceably with his neighbors, to vote honestly and intelligently, to bear arms if necessary in defense of his country, and to perform other common duties expected of every good citizen. Fundamentally what is good civic conduct for one member of a community is good civic conduct for all. There are not a thousand or a hundred different kinds of civic conduct, all good in themselves, about which one should know and among which one must choose according to his personal qualities or characteristics.

The problem which confronts the schools in relation to this kind of civic conduct is that of bringing about the same result, as nearly as possible, in all pupils, differing as they do in intelligence, personality, home environment, and previous education in civic matters. This is a matter of education, involving acquisition of knowledge as to what constitutes the desired conduct, cultivation of attitudes and habits which characterize it, and develop-

ment of the will to achieve it. Only by identifying education with guidance can this process be called "civic" guidance. However, in doing this job of civic education some of the methods and techniques that have long characterized vocational guidance may be used to advantage; for example, study of the individual, and exploratory experiences for the purpose of discovering his civic assets and liabilities. This, no doubt, accounts for the tendency on the part of some to apply the name "civic guidance" to what goes on, thus applying to what is done the name of certain methods by which it is done.

Putting the matter in another way, no second set of differences comparable to that found in a vocational, educational, or recreational guidance situation is present. Individual differences are present as they are in every educational situation, but not different civic goals. The school's task in this situation is to aid each pupil, by means suited to his peculiar needs, to progress as rapidly and go as far as possible toward a common goal of good civic conduct along the lines mentioned in the previous paragraph. To this task the term "civic guidance" does not apply. It is civic education.

COMMUNITY SERVICE GUIDANCE

However, there is another group of human activities often associated in the minds of many with good citizenship to be considered; namely, *unpaid community service* activities. These go beyond the kind of good civic conduct just discussed. They involve more than mere conformity to the common standards of a static society. They are concerned with improving existing conditions. And they are extremely varied in character.

Every community abounds with opportunities for participation in activities of this kind. Indeed these are often more than opportunities. They are downright challenges. Boy Scouts, Girl Reserves, and 4-H clubs require leaders. Young people's organizations of many kinds must have officers, committees, and, in some cases, older sponsors. Churches, women's clubs, men's service clubs, chambers of commerce, farmers' organizations, parent-teacher associations, the Red Cross, public forums, community fund drives, recreational programs, activities of political groups, all call for workers who serve without pay. Interests and abilities of many kinds are in demand—civic, religious,

social, health, recreational, scientific, forensic, literary, dramatic, artistic, musical, political.

Here is a genuine guidance situation. Individuals need assistance in finding their way into suitable community service activities just as truly as in finding their way into suitable vocational or recreational activities. The fundamental sets of differences are present—those among individuals and those among possible courses of action open to individuals. In this case the possible courses of action consist of the many varied types of community service already mentioned, and others. It is obvious that a given individual is not equally suited to all types. Each individual needs aid in choosing among these many types according to his personal characteristics if he is to participate wisely in community service activities. He needs, also, to acquire a sound method of procedure in meeting new opportunities and demands for such service that may arise as he grows older.

The question naturally arises whether this form of guidance should be called "civic" guidance. Certainly it is not what most writers on the subject mean by that term. Probably some would include it under "leisure-time" guidance since the activities concerned are carried on in what is usually considered as one's leisure time. To this term, however, objections have already been presented which seem valid. No other term appears to be quite as appropriate as "community service guidance." Moreover, this harmonizes well with the forms of guidance already accepted; namely, vocational, educational, and recreational, in that it connotes a definite group of activities. Therefore, in the later pages of this book the term "community service guidance" will be used in the sense just indicated and "civic" guidance will not be recognized.

"SOCIAL AND MORAL" GUIDANCE

Again, guidance or education, which? In the same manner it can be shown that worthy social and moral conduct—conduct in these respects which meets with the approval of society—is a product of the process of education rather than of a process that can properly be called "guidance" and that these so-called forms of guidance are nothing more than methods, long associated

with the term "vocational guidance," of achieving common desirable educational results along social and moral lines.

Morality is a matter of knowledge, attitudes, and habits that cut through all of life's activities. Acceptable social behavior likewise results from knowledge, attitudes, and habits that find expression in all of one's relationships with his fellows. In matters of social and moral conduct, as well as in the matter of civic conduct, there is an established common goal for the community and a well-marked route leading to it. Some will go farther than others, and some travel faster during their school lives. The problem is that of helping each one to make as much progress as he can along a common highway, not that of helping him to choose which of several highways he should follow, the choice depending upon his own aptitudes, interests, and personal characteristics. This is a problem of how to educate or develop him along these desirable lines—again a problem of educational methods.

Illustration of confused thinking. An illustration of the general misconception along this line and of the misuse of the term "social guidance" may not come amiss at this point. A few years ago a well-known educator, addressing the National Vocational Guidance Association, sought to stress the importance of other forms of guidance than vocational. In driving home his point he cited the case of a boy newly employed in the outer office of a large business organization. While the boy was seated at a desk working on some minor task a lady entered the office. She asked him two or three questions which he answered without rising from his seat. After the lady left the office a boy employed longer by the firm said to the new worker, "See here, young fellow, if you want to hold your job in this office you will have to show more respect to the ladies. The boss insists that you get on your feet instantly when a lady speaks to you." Said the educator, "What this boy needed was social guidance, not vocational."

Actually, what that boy needed and what he received was social education, in so far as his general social conduct was affected by the incident. It was social education with a vocational motivation which gave it punch and effectiveness. And it was no less social education because it was also vocational guidance definitely concerned with "assisting the individual . . . to progress in" an occupation already chosen and entered upon.

No doubt it was thought of as social guidance by the speaker because it was concerned with an item of social conduct closely related in this particular instance with a vocational guidance situation. If this conduct had occurred in a home or at a social gathering, it is quite possible that the same speaker would have lamented the boy's lack of social education.

"HEALTH" GUIDANCE

Confusion with health education. The idea of "health" guidance has come to occupy a prominent place in the current literature that deals with forms of guidance. One of Proctor's chapter headings is "Guidance in Health and Physical Activities."¹ Brewer includes health guidance in what he calls "Guidance in personal well-being."² Koos and Kefauver prefer the term "health" guidance,³ though little space is given to this topic by these authors. Many other writers stress the same idea and it has been recognized in the organization of some city guidance programs.

Just how "health guidance" differs from "health education" is not made clear by any of the authorities who use both terms. In fact, it will be found that if the word "education" is substituted for the word "guidance" in their discussions the material reads equally well and seems to mean the same. For example: "The fundamental need of adolescent youths is not for formal instruction in anatomy, physiology, or hygiene as subjects, but for guidance and training in the application of the principles of health and physical well-being to their own needs," says Proctor.⁴ What Proctor desires is that "habits of exercise and attention to the laws of health" shall be ingrained in all youth. Most educators consider this an educational job and would prefer so to label it.

No guidance situation exists here. The fact is that again only one of the two sets of differences that characterize a guidance situation is present. There are not a thousand, nor a hundred, nor a dozen different kinds of health about which one needs to know and among which one must make a choice for himself

¹ PROCTOR, *op. cit.*

² BREWER, JOHN M., *Education as Guidance*, New York: The Macmillan Company, 1932.

³ KOOS and KEFAUVER, *op. cit.*

⁴ PROCTOR, *op. cit.*, p. 187.

according to his personal characteristics. The health goal for one is the health goal for all, though, of course, not all make equal progress toward it. The individual needs to learn what knowledge, habits, and behavior are necessary to good health and how they can be made a part of his life. He needs to be taught the advantages of good health and the ways of acquiring and maintaining as high a degree of it as possible in view of his personal limitations. He needs practice in health habits, which to some extent are determined for him by his own physical condition, but which, in the main, are alike for all. But practice is merely the drill part of education. He needs strength of will to follow courses of action which he knows are healthful in preference to those which he knows are unhealthful. But strength of will in such a situation is determined largely by habits already formed and, in any case, is a product of inheritance and education rather than of anything that can properly be called "health guidance." In so far as the term "guidance" is used in the situation, it is applied to a method of health education.

It appears, therefore, that use of the term "health guidance" cannot be justified.

"LEADERSHIP" GUIDANCE

Another form of guidance that deserves examination is "leadership" guidance. Only two of the lists presented in the early part of this chapter include this term. These are the lists from Jones's *Principles of Guidance* published in 1930 and from his revised edition of 1934. That Jones believes strongly in this form of guidance is evidenced by the fact that he devotes more space to it in his later edition than in his earlier one, and gives it a special chapter in the later edition.

In discussing essentials in leadership guidance, Jones says:

If we are to establish anything like an adequate setup for the selection and training of leaders, we must (1) keep clearly in mind all these different kinds of leaders and provide for all of them; (2) devise methods by which we can discover early those who will probably develop into outstanding leaders; (3) develop methods by which these prospective leaders may be guided and trained so that leadership may be both intelligent and progressive; and (4) develop the ability in our young people to choose wisely those whom they shall follow.¹

¹ JONES, *op. cit.*, 1st ed., p. 364.

The different kinds of leaders referred to in (1) are indicated by the following paragraph:

First, there are the leaders who influence others more or less directly through personal contact of some kind. These are the politicians, statesmen, generals, lawyers, and preachers. Second, there are the leaders who create and may never come into direct contact with other people. Such are inventors, explorers, research workers—those who push further the bounds of human knowledge. Their influence is profound in all human history; they are absolutely essential to human progress. Third, there are the great musicians, artists and writers. . . .¹

Leadership guidance confused with education for leadership. It is not practicable or necessary here to go into the question of what constitutes leadership. It is worthy of note, however, that leadership is not an abstract quality but expresses itself in some activity or group of activities in which one engages. The same person often is a leader in one activity and a humble follower in another. Usually these activities are vocational in character as is indicated by Jones in the last paragraph. Sometimes they are of a nonvocational type—educational, recreational, or community service.

If youth are given proper assistance in “choosing, preparing for, entering upon, and progressing in” suitable educational, vocational, recreational, and community service activities, it seems fair to raise the question whether anything more can be done for development of leadership that properly may be called “guidance.” As a matter of fact, the essential elements of a guidance situation are not present in what Jones seems to be thinking of when he uses the term “leadership guidance.” There are not many types of leadership among which one must choose, except as the leadership is associated with the activities of some group such as those just mentioned. And then the choice is among the activities which make up the group, for example, the vocational, and the guidance provided should bear the name of that group of activities.

Anything else that Jones may have had in mind in the first of the two paragraphs quoted above seems to the writer to be education for leadership, which Jones discusses at length in a

¹ *Ibid.*, p. 363.

later book.¹ All will agree with him in wishing that this might be provided to the fullest extent. But, even so, it will be found that the problem is not one of just selecting and training leaders in the abstract but of selecting and training leaders in specific fields of activity. This selecting is very different from "assisting an individual to choose" a type of leadership as one chooses a vocation or a school or a recreation.

Guidance not a synonym for education. It may well be emphasized at this point that in case of each so-called kind of guidance that has been rejected in the preceding discussion, the word "education," in the sense of organized education, can be substituted for the word "guidance" without changing the meaning conveyed to the average reader. This is not at all true of any of the four terms "vocational guidance," "educational guidance," "recreational guidance," and "community service guidance." For the sake of clear thinking it seems necessary that in the vocabulary of educators the word "guidance" be discontinued in favor of the good old word "education" in all cases where the former is used to mean the same as the latter. As already pointed out, it is equally desirable to avoid use of the word "guidance" to designate certain teaching methods used for promoting the educational process.

ARE THERE STILL OTHER KINDS OF GUIDANCE?

Examination of Brewer's list of different kinds of guidance on page 14 will show that he mentions "religious guidance," "guidance for home relationships," "guidance in thoughtfulness and cooperation," and "guidance in wholesome and cultural action" in addition to the kinds already considered in this chapter, though the third of these four might be thought of as included in "social" guidance which has been discussed.

Other writers on the subject omit these kinds of guidance from their lists. Possibly they do not differentiate from education what Brewer has in mind when he uses these terms. Apparently Brewer himself does not make a clear distinction in this respect. In fact, if the word "education" is substituted for the word "guidance" in these terms the meaning conveyed to the minds of most readers would be the same. The goal sought appears to

¹ ARTHUR J. JONES, *The Education of Youth for Leadership*, New York: McGraw-Hill Book Company, Inc., 1938.

be a common goal for all—development in the individual of religious attitudes and habits, of wholesome attitudes and habits in home relationships, and so on; and attitudes and habits have long been considered products of the educational process. Certainly none of the above terms suggests a situation similar to that which one faces when he is called upon to choose which of several vocations he will follow or which of several curriculums he will pursue. In other words, a guidance situation is not present here, with its necessity for choice on the part of the individual among different courses of action according to his personal traits and characteristics.

What has just been said concerning certain items in Brewer's list seems to apply with equal force to the "economic" guidance mentioned by Paterson, Schneider, and Williamson (see page 14).

Some have used the term "personal relations guidance" and others "marital guidance," the latter of which seems to be included in the former. Certain elements of a guidance situation appear to be present when one chooses his friends or his life mate and when he makes the adjustments that become necessary as a result of these choices. No doubt much needs to be done in helping youth in these matters. Possibly they will come in time to occupy an important place in the list of different kinds of guidance. Also, other forms of guidance may arise. It is highly desirable, however, that every proposed form of guidance be subjected to careful examination before it is accepted as dealing with a genuine guidance situation.

Even if other kinds of guidance are recognized, it seems likely that vocational, educational, recreational, and community service guidance will continue to occupy the center of the stage as far as public school systems are concerned. And the spotlight will be on vocational and educational guidance, neither of which should be or can be completely separated from the other in actual practice. In fact, adequate vocational guidance must also involve recreational and community service guidance if the vocational interests of the individual are to be fully served.

For the sake of clear understanding and wise planning it is, therefore, highly desirable that the word "guidance" without a qualifying adjective, when used in relation to work of the schools, shall mean, not education itself, not individualized education, not teaching, not personnel work, not mental hygiene,

nor all of these combined, but the process of assisting the individual to choose, prepare for, enter upon, and progress in courses of action pertaining to the educational, vocational, recreational, and community service groups of human activities.

SUMMARY

Many different kinds of guidance are mentioned by writers in the field. While there is general acceptance of some of these, there is disagreement regarding others. In examining the different kinds for the purpose of determining which should be accepted and which rejected, a frame of reference is desirable. Such a frame of reference is available in vocational guidance as defined in Chap. I.

One of the two sets of differences—that among individuals—is present, of course, in case of every form or kind of guidance that can be mentioned. If the other set of differences is present in the particular kind of guidance undergoing examination—differences among possible courses of action open to the individual from which he must choose according to his peculiar personal characteristics—the individual needs assistance in choosing which courses of action he will follow, and in preparing for, entering upon, and progressing in these courses of action.

Judged by these standards, educational guidance must be accepted at once as a legitimate kind of guidance. The individual finds it necessary to choose which school, curriculum, subjects, extracurricular activities best serve his peculiar needs. In so far as these choices are not dominated by vocational considerations—and there are many such situations—assistance in making the choices and following them through is educational guidance. This includes choice of subjects and experiences for purposes of education along health, civic, social, and moral lines as well as along general and cultural lines. However, this is quite different from identifying guidance with organized education, or with teaching, or with individualized methods of teaching. For example, adapting teaching methods to individual needs is not educational guidance. It is just good teaching.

Recreational guidance also is an acceptable kind of guidance. There are several types of recreational activities—physical, social, avocational, entertainment, etc.—and many different activities of each type. Not all these are equally desirable for all people.

The individual needs assistance in choosing recreations which are suited to his personal characteristics. Such assistance may properly be called "recreational guidance."

Community service guidance likewise is an acceptable kind of guidance. There are many different types of unpaid community service activities to be carried on. Community service guidance involves assistance to the individual in planning a program of these activities which best harmonizes with his personality traits, and his other activities, including the educational, occupational, and recreational.

"Civic guidance," "health guidance," "social guidance," and "moral guidance" are not acceptable terms. What is meant by "civic guidance" as the term is generally used is civic *education*—education for a group of activities which are equally binding upon all members of the community. There are not a hundred or a dozen civic activities (unless community service activities are so classed) from which one must choose those suited to his particular personality. He needs education for a type of citizenship which is the common obligation of all, not civic guidance. The same is true in the realms of health, moral conduct, and social conduct. One does not choose among different kinds of health according to his personal needs. He may choose a particular course in health education or a particular recreation for the purpose of improving his health, but these choices are matters of educational and recreational guidance. The goal sought is the same for all—good health. Nor does one choose social or moral conduct on the basis of personality traits. Here, too, education, not guidance, is needed.

Most other so-called kinds of guidance should be called education, though personal relations guidance seems to imply a real guidance situation of complicated character. Possibly still other kinds of guidance may yet be accepted.

As far as school activities in this field are concerned, it seems likely that attention will focus upon educational, vocational, recreational, and community service guidance with the first two of these occupying the center of the stage.

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CHAPTER III

PUPIL PERSONNEL WORK: ITS NATURE, SCOPE, AND RELATION TO VOCATIONAL GUIDANCE¹

THE NATURE OF PUPIL PERSONNEL WORK

Recent educational literature offers few terms concerning which there is greater confusion than that pertaining to *personnel work*. Used extensively in discussions of elementary and secondary education with the word "pupil" before it and in case of higher education with the word "student" in this relationship, the reader cannot be sure just what is in the mind of the one who thus uses the term. Cowley brings out clearly that even among those who are considered authorities on student personnel work in colleges this confusion is striking, notwithstanding efforts made by a committee of the American College Personnel Association some years ago and by individuals later to bring about a common understanding of the term.²

While this chapter is concerned with personnel work in the public school system more than in higher educational institutions, no better approach can be found than through Cowley's careful discussion which deals with the subject in the college and university field. Cowley divides the definitions that have been presented into (1) those that are too inclusive and (2) those that are too restrictive.

Definitions that are too inclusive. Among those that are too inclusive Cowley notes as probably the most widely accepted the definition which treats student personnel work as synonymous with education. He maintains that

On the face of it, this is not a useful definition of the personnel field. As indicated earlier in this discussion, a definition has utility only when

¹ This chapter, with slight modifications, appeared in *The Harvard Educational Review*, VIII (January, 1938), 82-93, under the title, "The Nature and Scope of Personnel Work."

² W. H. COWLEY, "The Nature of Student Personnel Work," *The Educational Record*, XVII (April, 1936), 198-226.

one term of the statement can be substituted for the other term with general agreement among interested individuals. But can the term *personnel work* be consistently substituted for the term *education*? Obviously not. Learning the scientific method is admittedly education, but who is there who would say that learning the scientific method is personnel work? Similarly learning the principles of economics is education, but it certainly is not personnel work.¹

Another too inclusive definition, according to Cowley, treats personnel work as individualization of education. He points out that this is Walters's conception in his recent book, *Individualizing Education*,² and Strang's in her book, *The Role of the Teacher in Personnel Work*,³ and that numerous others have used the term in the same sense. However, says Cowley, if individualizing or personalizing the educational process is personnel work, then the Harvard system of tutors, the preceptorial conferences at Princeton, the honors courses at Swarthmore and elsewhere, and many other efforts to stress individual instruction become personnel work; and those engaging in this work become personnel workers instead of teachers. But, he continues,

A definition to be acceptable must delimit the field being defined. If it cannot be delimited, then nothing distinctive exists to define. Ergo, if there is nothing distinctive about personnel work, the term should be abandoned.⁴

Definitions that are too restrictive. Among the definitions of personnel work that Cowley lists as too restrictive are (1) that which treats the term as applying only to the placement in jobs and the follow-up of graduates; (2) that which limits the term to personnel research—the bringing together of accurate and reliable data concerning each student for use by various members of the staff of the educational institution; and (3) that which restricts personnel work to counseling, chiefly educational and vocational counseling. Concerning these and other restrictive conceptions of personnel work, Cowley has this to say:

¹ *Ibid.*, pp. 203–204.

² J. E. WALTERS, *Individualizing Education*, New York: John Wiley & Sons, Inc., 1935.

³ RUTH STRANG, *The Role of the Teacher in Personnel Work*, New York: Bureau of Publications, Teachers College, Columbia University, 1935.

⁴ COWLEY, *op. cit.*, p. 205.

One may reasonably say that some personnel work is placement since the converse of such a statement reads that placement is a part of personnel work. Similarly, one may acceptably observe that research is a part of personnel work and that counseling is a part of personnel work. It is fallacious, however, to say that research is personnel work or that counseling is personnel work. To make such statements involves confusing the part with the whole.¹

Cowley then insists that personnel work is not synonymous with guidance, though many use the terms interchangeably.² This is equally true whether guidance is defined with Brewer as a philosophy of education, with Kitson as restricted to aiding in choice of and successful entry into a vocation, or with Koos and Kefauver whose concept of guidance "is neither restricted to vocational guidance at one extreme nor extended to make guidance synonymous with all education at the other."³

It may be said in passing that Cowley would have found himself as badly off as at the beginning of his search for a satisfactory definition of personnel work had he accepted the idea that guidance and personnel work are synonymous. Treating one term concerning which there is almost hopeless confusion as synonymous with another term concerning which there is equally great confusion does not make for progress. What seems to the writer a fundamental weakness of Williamson and Darley in their otherwise valuable book⁴ is that they use the two terms "guidance" and "personnel work" interchangeably without adequately defining either.

Cowley's definition. Following this elimination of unsatisfactory definitions one by one, Cowley proceeds to formulate what he considers a logical, satisfying, and workable definition of personnel work. Noting that

In general three different kinds of college-student relationships are recognizable: those that have to do with business arrangements, those

¹ *Ibid.*, p. 210.

² Hamrin and Erickson use these terms synonymously throughout their book. SHIRLEY A. HAMRIN and CLIFFORD E. ERICKSON, *Guidance in the Secondary School*, p. 1, New York: D. Appleton-Century Company, Inc., 1939.

³ LEONARD V. KOOS and GRAYSON N. KEFAUVER, *Guidance in Secondary Schools*, p. 19, New York: The Macmillan Company, 1932.

⁴ E. G. WILLIAMSON and J. G. DARLEY, *Student Personnel Work*, p. xxi, New York: McGraw-Hill Book Company, Inc., 1937.

that have to do with instruction, and those that have to do with extra-instructional activities,¹

he points out that the activities of personnel work are distinct from business and instructional activities. He recognizes that at several points business and personnel responsibilities meet, as do also instructional and personnel responsibilities, but calls attention to the fact that upon practically every college campus in the country a group of officers have, within the past few decades, been appointed to have responsibility for the non-instructional, nonbusiness relationships with students. These are personnel officers. Personnel work may, then, says Cowley, be defined as follows:

Personnel work constitutes all activities undertaken or sponsored by an educational institution, aside from curricular instruction, in which the student's personal development is the primary consideration.²

However, Cowley makes it clear that this is presented for critical appraisal rather than as a final and adequate definition of the elusive and disturbing term. He points out, also, that this conception of the term is implied though not brought out clearly in the discussions of several other writers on the subject.

Cowley's definition inadequate. It is at once evident that Cowley has made an important contribution toward clearing up the confusion in this field. His analysis of earlier efforts to define personnel work is masterful and he has made apparent certain misconceptions that have been troublesome and persistent. Nevertheless, the writer does not find his definition adequate.

A definition to be satisfying should indicate the distinctive nature of the thing defined. The fundamental weakness of Cowley's definition seems to lie in its failure to differentiate clearly between the nature of personnel work, the nature of "curricular instruction," and the nature of the routine business activities of the educational institution. Clearly "the primary consideration" of all three of these is "the student's personal development," in the broad sense of this term, since this is the

¹ COWLEY, *op. cit.*, p. 215.

² *Ibid.*, p. 218. In a letter to the author Cowley has since reworded this definition to read: "Personnel work constitutes all relationships with students undertaken or sponsored by an educational institution, aside from curricular instruction and routine business relations."

reason for the existence of the institution. But each of the three has a distinct function to perform in promoting this development—a function which is determined by its distinctive nature. While Cowley recognizes this in his general discussion, the nature of personnel work as contrasted with the nature of each of the other two does not stand out at all clearly in the definition.

Moreover, defining a term used to designate part of a whole as all of that whole which is not included in its better known other parts does not satisfy as a definition if a better definition can be found, which is usually possible. Few would accept as an adequate definition the statement that the milk of a coconut is that part of the coconut which is neither shell nor meat.

Again, it is quite evident that in the administration of an educational institution some activities of vital concern to students which are neither instructional nor business in character may be so different from what are usually considered personnel activities that they should be given some other classification. To be more specific, it is the business of educational administration to formulate and reformulate in terms of changing conditions the specific objectives of the educational institution, to determine what environmental factors are essential to realization of these objectives in the lives of its students, to provide the most favorable possible environment to this end, to check from time to time on the effectiveness of the institution and its various parts in accomplishing the desired objectives, and to modify the setup in the direction of greater efficiency. To be sure, the wise administrator will call upon instructional staff, personnel staff, business staff, and others to assist in these matters; but the activities involved, however performed, are *administrative* in nature rather than instructional, business, or personnel, in any accepted sense of these terms.

Toward a more adequate concept. In order to arrive at a satisfactory statement of the nature of student personnel work in higher educational institutions and of pupil personnel work in elementary and secondary schools, it seems necessary or at least desirable to start with a common understanding of the terms "education" and "organized education."

A workable definition of "education." The most fundamental conception of education yet proposed treats it as a process of development which takes place within an individual under the

influences of environment. Whether or not the individual is aware of it, this process goes forward throughout his life. Sometimes it proceeds rapidly and sometimes slowly but it never halts completely till life itself is done. Sometimes it produces results that are wholesome for the individual and for society and sometimes results that are unwholesome, depending upon the environment and its relation to the needs and characteristics of the individual.

It follows that organized education, or education as planned and carried on in educational institutions, is that education which results from society's efforts to direct and facilitate by means of a controlled environment this process of individual development along lines that society considers wholesome for itself and for the individual. A school is thus an institution in which the environment, or most of it, is planned for the purpose of promoting the development of its individual pupils as just indicated.

Of course the controlled environment is determined by the type of society in which the school flourishes. If the society is that of a strongly centralized dictatorship, the school environment is of one sort. If the society is that of a democracy, the school environment is of a very different sort. In either case, however, the purpose is to direct and facilitate the individual's development along lines that the society concerned considers wholesome for itself and for the individual who lives in that particular society. And the environment is, or should be, consciously planned for the accomplishment of these purposes.

This controlled environment consists of several well-known parts or factors. One of these is the teaching which is determined by the personality, preparation, attitudes, and methods of individual teachers. Another is the curriculum or group of curriculums offered—the content of instruction, or rather of the teaching by whatever methods it is done. A third is the physical plant and equipment provided for the work of the school—buildings and their general equipment, playground facilities, libraries, laboratories, shops, etc., with the supplies needed for their successful operation. A fourth, and one to which inadequate attention has been given, is the social environment created by the mere bringing together of groups of boys and girls or youth for educational purposes.

In setting up and operating this controlled environment the school cannot afford to forget that enormous and varied out-of-school environment from which its pupils come and to which they return each day, which conditions to a high degree the contribution that the school can make to their individual development at the same time that it makes a tremendously important contribution of its own. In fact, the effectiveness of the school is popularly judged by the results of the total environment, in-school and out-of-school, upon its pupils, though the school has no control over and usually pays little attention to that outside the school.

Those who are responsible for organized education as thus conceived are, of course, concerned with the all-round development of the individual not merely with his intellectual development. They recognize that provision needs to be made for his development into as healthy and vigorous a human being physically as his inherited and earlier environmental limitations along this line permit. They take account of his need for civic, social, and moral development. They include the development that is essential to the successful pursuit of an occupation. Nor do they overlook the individual's family relationships nor his responsibilities as a consumer. Also, need for the development of his religious life is recognized even though this is not generally considered an obligation of the public school.

While there are these several kinds or aspects of education, the process in every case is that of individual development under the influences of environment. The purpose of all these as they are provided for in educational institutions is to produce in case of each individual a well-rounded, integrated personality that will function effectively in the society that sets up the organized educational environment for the individual's development. The terms "health education," "civic education," "vocational education," and the like are merely convenient means for designating parts of the entire process to which the term "education" has been given. All are included in this term when it is not preceded by a qualifying adjective.

With this understanding of education, of organized education, and of the school as society's special agency in carrying forward organized education, it should be possible to formulate an acceptable definition of "pupil personnel work."

A workable definition of "pupil personnel work." The term "personnel work" seems to have come into educational literature from the field of industry. Industrial management, in the second decade of the present century, gradually became conscious of the fact that other factors besides the worker's skill, the quality and condition of his tools, and his physical condition affect the worker's efficiency. It became increasingly clear that such factors as the worker's emotional reactions to situations arising both in connection with his work and outside it, and the suitability of the work he is doing to his mental capacity, special aptitudes, and personality need attention if his productive efficiency is to be at a high level. What industry did because of its concern with the *person* of the worker and with bringing him into his work under the best possible conditions for production came to be known as personnel work in industry.

In like manner, pupil personnel work deals with the *person* of the pupil as contrasted with the school environment set up for his education or development. *Pupil personnel work consists of those activities of a school or school system whose controlling purpose is to bring each pupil of the community into the educational environment of the schools in such condition and under such circumstances as will enable him to obtain the maximum of the desired development from his environment.* Its function is not to contribute directly to the personal development of the individual, as Cowley's definition implies. That is the job of the school environment provided for this purpose. Its function is, rather, to contribute indirectly to this desired end by seeing that the individual is in the best place afforded by the schools for his personal development and that he is there in the most favorable condition possible for that development.¹ It is, of course, a fundamental part of any adequate provision for organized education.

Pupil personnel workers, to be sure, must be interested in improving the environment provided by the schools for educational purposes. They should have valuable suggestions and

¹ Bradshaw approaches this conception of the term when he refers to personnel work as concerned with "delivering the student to the classroom in the optimum condition for profiting by instruction." F. W. BRADSHAW, "The Scope and Aim of a Personnel Program," *The Educational Record*, XVII (January, 1936), 121.

recommendations to make to this end. For example, an attendance officer in performing his regular duties may discover that pupils are dropping out of school because curriculum offerings do not meet their needs. A vocational counselor may discover that certain environmental factors in the school are constantly influencing many pupils to plan for college and the professions, who will do all that available evidence indicates they are capable of doing if they prepare for and enter skilled trade or office positions. In such situations these personnel workers, while doing the best they can to help the pupils directly concerned to make such adjustments as will bring them the maximum development from the school environment as it exists, are under obligation, also, to bring the weaknesses of this environment to the attention of those who have direct responsibility for educational policies that determine the school environment. Indeed, an alert and progressive superintendent of schools will see to it that personnel workers, as well as principals, supervisors, and teachers, make their contribution to curriculum building and other matters that affect the educational value of the school environment.

But making such needed changes is not personnel work. That belongs on the administrative and environmental sides, not the personnel side, of the educational problem involved. Nor is even bringing the need for action to the attention of those responsible for taking action truly personnel work, though it is a proper and compelling duty of personnel workers. Personnel members of the school staff must be expected to engage in other activities than personnel work, just as teachers perform other duties besides those of teaching which claim most of their time and give them their title.

The only road to clearness in this matter seems to lie in restricting the term "pupil personnel work" to those activities which have for their purpose bringing the pupil into that part of the school environment as it exists which best suits his needs, in such condition that he will derive from it the maximum of individual development along lines that society considers wholesome for itself and for the individual. This must be done regardless of what other duties a personnel officer may perform. It should be noted, on the other hand, that this conception of pupil personnel work does not relieve the home-room teacher or the subject teacher, or any other member of the school staff of responsibility

for pupil personnel work. It merely differentiates the personnel duties of a subject teacher, for example, from his other duties in a way that should result in the better performance of the former. This will become more apparent in later chapters, particularly in Chap. XVIII.

Thus pupil personnel work differs from industrial personnel work in the goal sought and in general purpose. One is concerned primarily with efficient production or service by human beings. This is brought out clearly by W. J. Donald and Edith King Donald, when they say:

There has been a tendency to eliminate certain classes of personnel service and to continue only those which have a direct bearing on the efficiency of the employee, his earning capacity, and by implication, his value to the company.¹

The other is concerned primarily with efficient development of individuals through the means provided for this purpose by society. The difference is due to the fact that industry is run for production and profit, not for the development and improvement of the workers. Possibly this will change in time (evidences of a tendency toward such a change are already appearing) and the purpose of organized industry become like that of organized education, development of the worker; but at present the chief interest of industrial management, as far as the worker is concerned, is in the worker's contribution to production. And industrial personnel work is conditioned by this fact.

THE SCOPE OF PUPIL PERSONNEL WORK

What, then, in the administration of a public school system, properly may be included under pupil personnel work as here defined? Certainly the following activities may be listed:

1. Obtaining the names, ages, and addresses of those children in the community whom the schools are intended to serve. This involves the school census program.
2. Seeing that those who should attend are present if possible; ascertaining reasons for prolonged absence; helping to remove obstacles to regular attendance. This includes the work of attendance officers and visiting teachers.

¹ W. J. DONALD and EDITH KING DONALD, "Trends in Personnel Administration," *Harvard Business Review*, VII (January, 1929), 153.

3. Seeing that those who come are in as good physical condition as possible to do the work expected of them and to benefit from the available school environment to the maximum degree. This involves medical and dental examinations and prescriptions, the varied inspection work of the school nurse, assignment of deaf, blind, and crippled children to special schools or classes when practicable, and the like.

4. Seeing that those in attendance are assigned to school activities suited to their mental capacities. This involves the psychological and educational testing program and the distribution and classification of pupils in accordance with test results and other data available.

5. Seeing that pupils are in as good condition as possible emotionally for the work expected of them. This includes the psychiatric or mental hygiene program and the work of the visiting teacher. It involves provision for obtaining information concerning out-of-school and in-school influences that are responsible for individual emotional disturbances and for treatment intended to eliminate or reduce the effects of these influences and to bring about a wholesome emotional state.

6. Seeing that the personality assets and liabilities of pupils are discovered, recorded, and used as aids in helping them find their way into those school and other activities that will best utilize and develop the assets and reduce the liabilities. A psychological service, an educational, vocational, and recreational guidance service, and possibly a visiting teacher service are involved here.

7. Seeing that special aptitudes, interests, and limitations of pupils are discovered and recorded for use in helping them to plan their educational, vocational, and recreational programs. This involves provision for special aptitude testing, for exploratory experiences of varied character, and for an adequate system of well-kept records. Both a psychological service and a personnel record service are included.

8. Seeing that pupils find their way into school activities, curricular and extracurricular, that best will serve their needs as shown by all the data available, and prepare them for steps ahead educationally and vocationally. This involves a program of educational, vocational, and recreational guidance, especially counseling.

9. Seeing that those who leave the school find their way into and progress in activities that call into use the development obtained while in the school and that tend to encourage continued development. The placement and follow-up parts of a broad guidance program are involved here.

Provision by school systems for personnel work. While all school systems engage in some of these different kinds of pupil personnel work, it is at once recognized that comparatively few have made provision for all of them. It would not be difficult to find public schools that provide only for the first two—the school census and attendance work. Among those systems that do something along all nine of the lines mentioned, great differences in emphasis will be found, one stressing health inspection; another, classification of pupils according to mental capacity; another, mental hygiene; another, vocational and educational guidance; and, perhaps, another with fairly well-balanced emphasis on three or more aspects of the work. Of course, there are great differences in the effectiveness of programs that appear superficially to be equally comprehensive. However, it appears that all the different kinds of pupil personnel work carried on in city school systems may be classified under these nine categories.

Difficulty of separating pupil personnel work and teaching. Out of this conception of pupil personnel work arises a question, already suggested, that needs further consideration. Can pupil personnel work be so clearly differentiated from the educative process? Must not personnel workers contribute directly as well as indirectly to the pupil's development? And must not the teacher, also, make a contribution at times to bringing the pupil into his school environment under the best conditions to benefit from it? For example, is it not to be expected that the school physician will teach the child whom he examines something about how to care for his health at the same time that he determines and records that child's health condition and recommends a suitable course of treatment in the case? Must it not be taken for granted that high school subject teachers generally will help their pupils to plan their educational and vocational programs as well as to obtain the greatest individual development possible from the subjects taught by these teachers?

There can be no doubt that the personnel worker often contributes directly to the learning process. He, just as truly as the

teacher, constitutes part of the total school environment. And the subject teacher just as truly has a place in pupil personnel work. But because the personnel worker does some teaching and the teacher does some personnel work is no reason for confusing the two terms. They represent distinct functions regardless of what school officer performs them. The important thing is that they be so recognized and that the best possible provision be made for the performance of both. This implies that pupil personnel worker and teacher alike should limit the work they do in each other's field in accordance with a general plan for the school system and in accordance with their individual qualifications.

It may be argued that pupil personnel work itself, whether done by personnel worker or by teacher, is concerned directly with the proper development of the pupil's personality as well as with bringing him into the most favorable environment for this development; that, for example, if personnel work in connection with its discovery of a remediable personality handicap fails to give the pupil direct assistance in overcoming that handicap, such work does not deserve the name it bears. The answer seems to be that the pupil personnel worker may give this assistance if qualified to give it effectively. If not so qualified he should not attempt to give it but refer the case to some qualified person. But the moment he gives or attempts to give such service the individual who gives it steps out of personnel work into teaching.

THE SCOPE OF STUDENT PERSONNEL WORK IN COLLEGE AND UNIVERSITY

In the main what has been said concerning pupil personnel work applies also to student personnel work on the college and university level. The objectives are the same. A similar relationship exists between the personnel work needed and the educational service provided. However, the college and university students are older. They are in higher educational institutions from choice. Most of them are away from home. They are, on the whole, a more intelligent and more homogeneous group. They are more "set" in their personality characteristics. A larger proportion of them have chosen vocations and many are already preparing for these vocations. For these reasons somewhat different groups of activities make up the personnel work. Keeping in mind that the purpose of personnel work in college or

university is to bring the student into the educational environment provided by the institution at such points, in such manner, and in such condition that he will derive from that environment the maximum of wholesome individual development, it seems necessary to recognize the following as student personnel activities:

1. Activities concerned with admitting the student. These include preparation of blanks to be filled out by those seeking admission and by school principals and others for them; study and evaluation of these papers when submitted; giving subject-matter examinations for admission purposes; conferring with applicants for the purpose of arriving at a decision concerning their fitness for admission; preparing and using for admission purposes aptitude tests, such as those given to applicants for entrance to class A medical schools; and other activities carried on for the same purpose.

2. Activities concerned with aiding the student to make suitable living arrangements. Whatever is done to help individual students find, according to their means, the kind of room, board, and general living conditions most favorable to good college work belongs in this group; also, helping those who must support themselves either wholly or in part to obtain suitable part-time employment. What actually is done varies from nothing at all to the requirement that entering students live in college dormitories presumably designed and operated with a view to providing living conditions as favorable as possible to good college work and to the student's development through his living arrangements.

3. Activities concerned with the orientation of the student with reference to the facilities of the institution and the community. Acquainting students with the libraries, health service, counseling service, recreational facilities, extracurricular and community service opportunities, and the like; giving "placement" tests as an aid in classifying students; conducting sight, hearing, speech, and other physical examinations for the purpose of discovering special needs; and assigning students to classes, and sometimes to special seats in classes, as a result of such tests and examinations, all are included in this group of activities.

4. Activities concerned with keeping the student in good health physically, mentally, and emotionally. Provisions made for periodical physical examinations of students; for treatment of physical disorders, including hospitalization; for needed psycho-

logical and psychiatric examination and treatment, and other provisions of this character, are included here.

5. Activities concerned with bringing together personal data for use in dealing with the student. Whatever is done in assembling in suitable form for ready use the individual student's records in subjects already pursued; health record to date; results of physical examinations; scores made in intelligence tests; record in extracurricular activities; evidences of special aptitudes, limitations, and personality traits; wage-earning record to date—records of personal assets and liabilities of any kind—belongs in this group of activities.

6. Activities concerned with counseling the student. These consist of all that is done to help the student by means of individual conferences to assemble, weigh, and evaluate data that are significant in making educational, vocational, and other plans that will affect his development while in the institution and later.

7. Activities concerned with placing the student when he leaves the institution. "Placing" is used only for want of a better term. What is really meant is helping the student when he leaves the institution to get off to a good start—to make an advantageous entry into the work and life that lie ahead. These activities include whatever is done to aid the student who is obliged to leave because of poor work,¹ ill health, financial or other reasons; the one who leaves voluntarily to enter an institution of different type; and the one who graduates, to find and enter an institution or place of employment suited to his personal assets and liabilities and favorable to his future development.

8. Activities concerned with the adjustment of former students. Included in this group of activities are whatever counseling, placement, and other follow-up service is provided for former students with a view to helping them make adjustments that will contribute to their further development.

RELATIONS OF PERSONNEL WORK TO GUIDANCE

It should be clear that personnel work in school and college as presented here includes educational, vocational, recreational, and community-service guidance. Personnel work is the broader term involving all of the activities whose controlling purpose is

¹ Too often all that is done for this student is to say to him, "You don't belong here."

to bring each pupil or student into the educational environment provided by the school system or college in such manner that he will derive from this environment the maximum of the desired personal development. Some of these activities are concerned with gathering data concerning pupils as, for example, taking the school census and giving psychological tests. Some are concerned with directing or assigning pupils on the basis of data gathered. Placing a child in an open-air school or in a class for the hard of hearing is an activity of this type. Some are concerned with aiding individuals to decide upon courses of action for themselves upon the basis of available data. Vocational counseling is an illustration.

Those personnel activities whose controlling purpose is *to assist the individual in choosing and following through* courses of action which will make the optimal contribution to his personal development properly may be called guidance activities, with some qualifying adjective before the word "guidance" depending upon the field of action.

If the choice to be made is between history and biology or between Harvard and Oberlin in planning a liberal education, the activities engaged in for the purpose of aiding the individual to make a wise choice constitute "educational guidance." The same name may be applied to those activities whose purpose is to aid the individual in choosing school subjects that will serve his special need for development as a social unit, as a citizen, and as a consumer. If the choice is between courses of action that will determine the individual's transfer from school to such an occupational career as seems best suited to his personal characteristics, the activities engaged in may well be called "vocational guidance." If the goal sought is to help the individual make such choices and adjustments as will result in his physical, social, entertainment, and avocational recreations contributing most richly to his personal development, the name "recreational guidance" may be applied to the activities concerned.

Possibly most authorities on the subject would accept all the activities listed above as belonging to pupil and student personnel work. The difference between these authorities and the writer lies not so much in what should be done under the name of personnel work as in the relation of what is done to the educative process.

The above concept and grouping of personnel activities also seem to serve an important purpose in focusing attention upon the relations of an expanding group of student services to the very *raison d'être* of the educational institution. The significance of student personnel work as here presented deserves a recognition in the administrative setup of school systems and higher educational institutions that it has not yet received. Attention is given to the implications of this conception of pupil personnel work for administration of a city school system in Chap. XVIII.

SUMMARY

Among the different definitions of student personnel work some are, as Cowley indicates, too inclusive and others too restrictive. Cowley's own carefully worded definition: "Personnel work constitutes all activities undertaken or sponsored by an educational institution, aside from curricular instruction, in which the student's personal development is the primary consideration" is inadequate. The *distinctive* nature of the thing defined is not indicated. Administrative activities are included in the definition. The primary consideration of all activities of an educational institution is the student's personal development.

Workable definitions of education and of an educational institution are basic to a satisfactory definition of student personnel work. Education is a process of individual development under the influences of environment. An educational institution is a social agency set up for the purpose of directing and speeding up this process by means of a controlled environment along lines that society considers wholesome for itself and for the individual. Among the factors of the controlled environment are the teacher, the curriculum, methods of instruction, and the physical plant and equipment of the school.

Pupil personnel work consists of those activities of a school or school system whose controlling purpose is to bring each pupil of the community into the educational environment of the schools in such condition and under such circumstances as will enable him to obtain the maximum of the desired development from his environment. When a pupil personnel worker teaches or assists in improving the curriculum, as he may well be called upon to do, he steps out of character for the time being and does something other than personnel work.

Thus defined, pupil personnel work in a school system includes

1. Preparing the list of those who should be in school (school census work).
2. Seeing that these are in school when they should be (school attendance work).
3. Seeing that they are in good physical condition (medical and dental inspection work).
4. Seeing that they are in classes suited to their mental capacity and achievement (research and testing work).
5. Seeing that their emotional condition is favorable to learning (mental hygiene work).
6. Seeing that they are favorably placed in school activities with reference to development of desirable personality traits (psychological work and guidance work of different kinds).
7. Seeing that their special aptitudes and limitations are considered in arranging educational and vocational plans (psychological work and guidance work of different kinds).
8. Seeing that they find their way into various high school activities according to their need (different kinds of guidance work).
9. Seeing that those who leave school enter and progress in suitable activities (different kinds of guidance work).

In colleges and universities student personnel work includes admitting students; providing for suitable living arrangements; orientation activities; the physical, mental, and emotional health program; activities concerned with obtaining and keeping student records; student counseling; assistance in placement upon leaving the institution, and assistance in making adjustments for a time after leaving.

Personnel work in school and college thus includes educational, vocational, recreational, and community service guidance and other activities also. Those parts of a pupil personnel program which are concerned with assisting the pupil to choose among different courses of action and to plan accordingly may properly be called "guidance" activities. School census work, attendance work, and other parts of the personnel program which do not involve choice on the part of the pupil are important means of bringing pupils into the educational environment provided by the schools but they are not guidance activities. Likewise only certain parts of the student personnel program in colleges and

universities can properly be called "guidance." Vocational guidance, aimed at the best development of the individual with reference to the vocational aspects of his life, is therefore, only one part, though an important part, of the personnel program.

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CHAPTER IV

THE NEED FOR AN ORGANIZED PROGRAM OF VOCATIONAL GUIDANCE¹

From what has been said in earlier pages it will be understood that the term "guidance" when used without a qualifying adjective in this chapter, as it may be at times, is neither a mere abstraction nor a synonym for education. It is used rather to designate the "process of aiding the individual to choose, prepare for, enter upon, and progress in" courses of action pertaining to definite groups of human activities. Unless preceded by a qualifying adjective the word is understood to include all of the forms of guidance accepted in Chap. II—educational, vocational, recreational, and community service. This does not mean to deny the existence of other forms of guidance. It means only that attention will not be given to other forms in this discussion which is concerned with guidance as part of a program of organized education. Attention will be focused mostly on vocational guidance, with the hope that the reader also will have in mind the applications of what is said to the other forms of guidance.

Basis of the need. The fundamental reason why guidance is needed with reference to the activities just mentioned is found in

¹ In the early days of the vocational guidance movement (1915) the author stressed this need when discussing certain features of vocational education in Germany. He said: "It should also be observed that the dual system [of education] apparently discourages the development of a wise plan of vocational guidance. In the United States consideration of vocational education quickly led to the conclusion that boys and girls need assistance other than that usually afforded by parents in choosing the vocation they will enter, as well as training for efficiency after the choice has been made. To be sure, this movement is comparatively new, and there is much discussion as to the measure of responsibility to be taken in the matter by the parent, by the school, by the State, and by industrial and commercial organizations. Nevertheless, the need of a rational plan has become obvious, however responsibility may be shared." GEORGE E. MYERS, *Problems of Vocational Education in Germany*, p. 40, U.S. Bureau of Education, Bulletin 33, Washington: Government Printing Office, 1915.

the two sets of differences which received attention in earlier chapters—differences among individuals and differences among courses of action open to them. As already pointed out, without both sets of differences the necessity for choice would not arise nor the need for assistance in making wise choices. It follows as a natural corollary that the more numerous, varied, and difficult to understand the possible courses of action are, the greater the need for help. For example, the boy of today who is thinking of entering the agricultural field, with its many special lines and the requirements that have come with increased scientific knowledge in this field, is in far greater need of help than was the boy who faced the same problem one hundred years ago when the agricultural group of occupations was much smaller and simpler.

Extent of the need while youth are still in school. According to the United States Census, nearly 2 $\frac{1}{2}$ million youth annually reach a given age, say, eighteen years, in the United States. It follows that approximately this number each year, at ages mostly between sixteen and twenty-five and with differing amounts of schooling, discontinue their full-time attendance at educational institutions and enter or seek to enter some kind of occupation. This includes, of course, those young women who become homemakers as well as the wage-earning groups reported by the United States Census. Either before leaving school or at that time, it must be determined in some manner what particular occupation each wishes to follow. Here, then, is a new army each year of more than 2 million youth, each of whom faces the necessity of finding his way into one of the thousands of occupations which surround him. How this is done by many when unaided was pointed out years ago, by such studies as those of Reed,¹ Lewis,² and Burdge.³

Now as then some chance circumstance more often than careful thinking and systematic planning determines what occupation is entered. Even among college students the need is great for assistance in choosing subjects to be pursued and in making voca-

¹ ANNA Y. REED, *Junior Wage Earners*, New York: The Macmillan Company, 1920.

² ERVIN E. LEWIS, *Work, Wages, and Schooling of Eight Hundred Iowa Boys*, University Extension Bulletin 9, Iowa City: State University of Iowa, 1915.

³ HOWARD G. BURDGE, *Our Boys*, Albany: State of New York Military Training Commission, 1921.

tional plans. Among graduates of the College of Literature, Science, and the Arts of the University of Michigan in 1932 and 1933 the writer found more who mentioned educational and vocational guidance than anything else in answer to a question concerning ways in which the University might have been more helpful to them. "First of all," said one, "I wish to comment on the inadequacy of the student advisory system and the lack of adequate vocational guidance for beginners."¹ There was "lack of vocational guidance and help in planning of courses to be taken,"² said another. Many other similar comments were made.

Wrenn reports that annual studies of freshmen in the University of Minnesota consistently show that from 25 to 35 per cent of them have made no vocational choice.³ According to Culver, the percentage of freshmen at Stanford who are not able to make any statement as to vocational choice varies from 45 to 50 per cent.⁴ In his study of the vocational choices of college students in Long Island College, Sparling came to the following conclusions:

1. The majority of the students expect to enter a vocation in which they will have an intelligence handicap. . . .

2. An astonishingly large proportion of students, 37 per cent, are preparing to enter vocations involving subjects in which their grades are low. . . .

3. Of the students who intend to be physicians 50 per cent do not have grades high enough to admit them to a medical school in the United States; of those who intend to be teachers 75 per cent have grades below 80 in the subjects which they intend to teach; of the students who have chosen dentistry 50 per cent will not be able with their present grades to gain entrance to dental schools in New York City.

4. Serious discrepancies exist between the types of work the student likes to do and the types of work required by the chosen vocation.

5. Nearly 75 per cent of the students are failing to take reasonable advantage of the athletic and non-athletic recreations, hobbies, and

¹ GEORGE E. MYERS, "Michigan Graduates during the Depression," *Michigan Alumnus Quarterly Review*, XVII (January, 1936), p. 47.

² *Ibid.*, p. 46.

³ C. GILBERT WRENN, "Vocational Guidance and the College Curriculum," *Occupations: The Vocational Guidance Magazine*, XVI (October, 1937), 36.

⁴ BENJAMIN CULVER, "When Students Choose Careers," *Personnel Journal*, XIV (1935), 64-70.

accomplishments which are most appropriate to the vocations they have chosen to enter. . . .

8. The dearth of information about the professions chosen is striking. Eighty per cent of the students believe they are going to earn more than the average practitioner actually earns. . . . Want of information is further shown by the fact that only 7 per cent have the knowledge which enables them to make comprehensive plans for entering their vocations.

9. . . . Seventy per cent are endeavoring to gain entrance to three of the most overcrowded vocations in the United States, and 95 per cent are desiring to enter four of the most overcrowded vocations in the metropolitan area.¹

The need on the part of high school youth for assistance in making their vocational choices and plans is well illustrated by the following quotations from the Report of the Regents' Inquiry into the Character and Cost of Public Education in the State of New York:

Pupils' replies to questions about their vocational futures reveal that *large numbers of boys and girls on the point of leaving school either have no vocational plans or have plans which are quite out of line with their own demonstrated abilities and with opportunities for employment.*²

In spite of the lesson that an economic depression might be supposed to have taught them, relatively few pupils recognized that the lack of opportunities for actual jobs might have to be reckoned with.³

The wisdom or lack of wisdom with which pupils were making their long-range plans was reflected also in the relation between their choices and the abilities they had shown in school. Pupils' vocational choices in general appeared to be geared roughly to their intelligence, the financial levels of their homes, and their school achievement. The pupils who ranked lowest in these measures more often hoped to be mechanics, commercial artists, beauticians, and bookkeepers; the pupils who ranked highest tended to choose such occupations as engineering, teaching, medicine, and the law. The inclination of all groups of pupils, however, was to choose much more frequently occupations at

¹ E. J. SPARLING, *Do College Students Choose Vocations Wisely?* Teachers College Contributions to Education 561, pp. 95-96, New York: Teachers College, Bureau of Publications, Columbia University, 1933.

² FRANCIS T. SPAULDING, *High School and Life*, p. 55, New York: McGraw-Hill Book Company, Inc., 1938.

³ *Ibid.*, p. 56.

or approaching the professional levels than at lower levels, with the result that the number of choices at the upper levels was entirely out of proportion to present job opportunities. Furthermore, there was almost the widest possible range of choice among the pupils at any one level of ability, home background, or achievement. Large numbers of boys and girls of exceptional intellectual ability were looking forward to occupations which would never offer them a real challenge. Young people from homes ranking very low economically were often planning on careers which, if not quite out of the question from the financial standpoint, could be achieved in their cases only with extraordinary difficulty. Many pupils with mediocre or poor school records or with training in curricula offering no substantial basis for continued academic work, had in mind vocations which could be prepared for only by graduate study in a higher institution. Whatever degree of realistic wisdom was shown in the average choice of any large group of these pupils, individual unwisdom on the part of its members proved a more significant characteristic.¹

The interviews with pupils who were working suggested that *the boys and girls who succeed in getting jobs are more concerned with the superficial conditions of their work, or the satisfaction of having any kind of job, than with particular opportunities which their jobs offer.*²

The need after youth have left school. Nor does the need for vocational guidance cease when youths leave school or college. Some are obliged to pass through a long and distressing period of unemployment before obtaining the first job. Others feel obliged to take the first job available regardless of their vocational plans. Even those who have the advantages of a good program of vocational guidance while in school sometimes make wrong choices or get off to a bad start in suitably chosen occupations. Also, changing conditions in business and industry make many changes in occupations necessary. With such inadequate vocational guidance as has been given in the past, great numbers of men and women who have been working for years, and young workers especially, shift from one occupation to another. In some cases this is a matter of necessity; in others, a matter of choice. Shifts from necessity are especially frequent in times of business depression.

One of the outstanding facts of the varied welfare activities of the United States government during the depression period of the

¹ *Ibid.*, pp. 56-57.

² *Ibid.*, p. 64.

1930's—Federal Emergency Relief Administration, Civilian Conservation Corps, National Youth Administration, and Works Progress Administration—was the need for vocational guidance. This is brought out clearly in Lake's study of 4,000 adults who attended F.E.R.A. vocational classes in Michigan in 1934-1935. Says Lake in his summary:

There is evidence of lack of understanding of occupational opportunities and of a blind following of social and educational traditions. At the same time there is no evidence that either the schools or the individuals have realized the problem to the extent of attempting a systematic solution . . . Very few persons in this study have ever received what they consider adequate vocational guidance. An overwhelming majority feel that they needed such assistance and that it would have meant much to them.¹

Lake's study indicates, also, that these men and women were still much in need of this assistance.

The same need was shown in striking manner by the Maryland study based upon interviews with 13,528 representative young people between the ages of sixteen and twenty-four. Of these youths 19.5 per cent were unemployed, while 40.3 per cent had full-time jobs, and 6.1 per cent, part-time jobs.² More than four out of ten (43.2 per cent) of those regularly employed reported that they were in dead-end jobs.³ Nearly four out of ten (38.3 per cent) desired professional-technical positions though only 7.5 per cent held positions of this type when the study was made,⁴ and the proportion of the general populace engaged in such occupations is but little larger than this. The following paragraphs taken from its Foreword summarize conditions revealed by the Maryland study:

The second need identified by this study is that of finding employment for youth as they emerge from their school experience. The gap which now exists between school and employment is reaching ominous proportions. It is established in this study that the percentage of out-of-school

¹ FRANCIS X. LAKE, "An Analysis of the Enrollment Personnel in Emergency Adult Education Classes in Michigan 1934-1935," pp. 136, 138. Unpublished doctor's dissertation, University of Michigan, 1937.

² HOWARD M. BELL, *Youth Tell Their Story*, p. 105, Washington: American Council on Education, 1938.

³ *Ibid.*, p. 128.

⁴ *Ibid.*, p. 133.

and employable youth who had not obtained any full-time employment at the expiration of a year after leaving school falls within the range of 40 to 46 per cent. The average period of delay for the youth who dropped out of school before the age of 16 was three and a half years, and the average duration of the unemployment of all these youth was a year and eleven months. Twenty-six per cent of all of them have never been employed. It is imperative, therefore, that ways be found of bridging this gap.

A very large percentage of youth assert that economic security is their most urgent personal need. The problem of unemployment is very great, but even employed youth face serious difficulties. Rates of pay tend to be low; hours tend to be long; a majority of youth with jobs must contribute to the support of families. Many youth are in blind-alley jobs. Some are in jobs which they will shortly lose because of advancing age. Many more aspire to enter professional and semi-professional fields than are at all likely to be accommodated, and the majority are forced into unskilled or only slightly skilled occupations. Youth face an occupational future in industry that is becoming more mechanized, less concerned with highly developed mechanical skills, less given to practical instruction outside the industrial plant, and more insecure for one with a single vocational skill. In a word, *mobility* has taken the place of *fixity*, and *uncertainty* the place of *security*.

Guidance is one of youth's most pressing necessities. Under present conditions only a small minority of youth are receiving anything that could be called adequate vocational guidance. The increasing complexity and tempo of modern life demands a more effective system for the induction of youth into appropriate channels of employment than now exist.¹

Here, then, is another great army, an army of out-of-school youth and adults whose need for vocational guidance must be added to that of the army composed of those who leave our educational institutions each year.

The individual's need of vocational guidance from a financial viewpoint. If for no other reason than because of its financial advantages to the individual, vocational guidance must be recognized as a need of great importance. It has been noted that many young people enter wage-earning occupations by chance methods and with very little consideration of their suitability, and that they shift a great deal from one occupation to another, often with equally little thought of the advantages or disadvantages of the change. On the other hand, some remain

¹ *Ibid.*, Foreword.

longer than they should in the first job after having found it in the same haphazard manner. In the one case a desire for more wages or a whim or caprice or pique of the moment may bring an undesirable change, while in the other case sheer inertia and fear of the new may prevent a desirable one. Often there is economic loss to the young worker in either case. He takes longer to get his stride and to reach his maximum earning power in the occupation which he finally follows than if he had entered this occupation at or near the beginning of his wage-earning career. Often he spends years of time without income and a large amount of money besides in preparation for a profession for which he is unsuited and which finally he is obliged to abandon.

An illustration is found in the case of a graduate of a well-known university law school. When this young man was graduated from high school his father said to him, "Now, son, you go to my alma mater and prepare for the law. When you graduate I shall take you into my office and make you junior member of the firm." The son obediently went to his father's alma mater and completed creditably the combined literary and law courses, finding time also to indulge to some extent his interest in music. Upon returning to his father's office he demonstrated within a few months his complete unfitness for the legal profession. The young man, with the approval of his father, soon abandoned law and went to New York City, where he has since succeeded in a musical career, both as a performer and as a composer.

The financial loss to the individual in a case of this kind is usually far heavier than appears on the surface. It consists not only of the additional cost of his education on account of his preparation for two vocations rather than one. It includes, also, the loss of earnings that might have been his as a result of earlier entrance upon his vocation. Since his total working period in his vocation is shortened by the years of delay in getting started at it, the earnings of the later and more productive years of his working life, rather than those of the first few years, actually measure his financial loss. This may well mount high into the thousands of dollars.

Take the case of a boy who works two years as an apprentice in the printer's trade and then changes to that of the machinist, serving a four-year apprenticeship in the latter trade. His

earnings during the first six years of his working life would have been \$2,100 more if he had become a machinist's apprentice at the beginning, assuming steady work, a 40-hour week, a 50-week year, apprentice wages of 21, 24, 27, and 30 cents per hour for the first, second, third, and fourth years of both trades, and 75 cents per hour as a journeyman machinist's wages. If, after ten years as a machinist and fifteen more as a foreman, this individual should become a shop superintendent for the rest of his working life, at \$3,000 per year, the total difference in his income from the two courses of action would amount to more than \$5,000.

If costly errors of this kind were rare it might well be questioned whether the economic need of individuals for vocational guidance were great enough to claim the attention of society. But such studies as those mentioned above and data from many other sources make it clear that a large percentage of men and women now employed found their way by wasteful methods into the work they are doing. Indeed, one need only ask fifty of his friends from different fields of work how they came to enter the occupations now followed to find abundant evidence in support of this statement.

Loss to the individual through staying in an unsuitable occupation. Serious as is the financial waste due to wage earners shifting without good reason from one occupation to another, it is trivial in comparison with that resulting when they stay in occupations for which they are unsuited. Many spend their entire working lives in such occupations. Their work is good enough in quality and quantity to "get by," though it is below that of the fortunate ones who find in the same work just the proper outlet for their aptitudes and interests. The number who spend from a few months to several years in work for which they are unsuited must be enormous, though we have no means of estimating it and few scientific studies throw any light on the subject.

A few years ago the writer observed two women operating adjacent power sewing machines in a shirt factory in New York City. Both were performing the same operation, sewing in sleeves, and both were paid by the piece. The superintendent said that the one on the right, an Italian woman, was earning nearly twice as much per week as the one on the left, an American woman, and doing it with much less effort and nervous strain.

The superintendent of an olive-packing plant told the writer that if he were to take on 25 new girls to pack stuffed olives in bottles, probably 10 of the number would be unable to develop sufficient speed to earn a wage at piece work that would justify them in continuing the work or the employer in keeping them. It is possible that at some other kind of work the American woman would have surpassed the Italian, and that the 10 who failed as olive packers, usually after several weeks of trial, would have surpassed those who succeeded. Also we have no evidence that some of those who succeeded as olive packers might not have done much better at something else.

Illustrations of this sort might be multiplied indefinitely. During the World War Link found many shell inspectors, gun-parts assemblers, clerks, machine operators, and others who were employed for considerable lengths of time before it was discovered that they were unsuited to the work they were doing.¹

Economic advantages of vocational guidance to employers. Nor is it individual workers only who benefit financially from vocational guidance. Business organizations experience a similar need of this service for young people who come to them for employment. It is a well-known fact that industry and business suffer heavy financial losses because of labor turnover. When an electrician's apprentice decides to become an automobile mechanic, when a telephone operator decides to become a department-store sales girl, and even when an automatic machine operator leaves his machine to become a toolmaker's apprentice, a new worker must be developed to the point of proficiency attained by the one who left before the employer ceases to lose as a result of the change.

The extent of the employer's loss varies greatly, depending upon the skill and knowledge required in the work, the time the young worker has been employed, his natural aptitude for the work, and the like. The quality and quantity of the available supply of labor for the position left vacant also enter into the question. The real measure of the employer's loss is the cost of bringing a new worker to the degree of proficiency attained by the one who left. This includes the cost of the time spent by the employing officer in interviewing applicants, looking up

¹ HENRY C. LINK, *Employment Psychology*, New York: The Macmillan Company, 1919.

their records, and selecting a worker from among them. It may include advertising in the daily press. It includes the value of a foreman's time in showing the new worker what is to be done and teaching him how to do it. It includes more damage to equipment, larger waste of materials, greater accident hazard, and lower production during the learning, or breaking-in, period.

The costs of labor turnover have been estimated variously by different writers on the subject. The estimates deal chiefly with factory labor and range from about \$50 to \$200 per man, depending upon the kind of work done. The estimate for one street railway company was \$370.43 per man for trainmen in the service one year or less. A large telephone company estimates that the loss of an experienced telephone operator costs them \$75, the expense involved in selecting and training a new one.

The total annual cost of labor turnover to the business and industries of the United States is, of course, enormous, especially when business is good. In prosperous times when new jobs are easily secured it is not at all uncommon for an industrial establishment to have a turnover of 100 per cent or more in a year; that is, to be obliged to take on within the period of a year a number of new workers equal to the average number of employees per day during that year. Indeed, Slichter cites case after case where labor turnover during the First World War period was higher than 200 per cent, in some instances going as high as 400 per cent.¹

A large telephone company employing 2,600 girls as operators in 1920 was obliged to take on and train 2,600 new girls in order to keep the force up to normal. In 1925, with a force increased to 3,500 girls, the turnover was 55 per cent; in 1926 this increased to 70.3 per cent. The great majority of the girls who left the company went into other and quite different lines of work where their new employers had to spend money in making them proficient, though a limited amount of the training given to telephone operators carries over into such occupations as department-store selling and office work.

While labor turnover on the initiative of the workers is lower in periods of economic depression, it is, nevertheless, an item of considerable financial importance to employers at all times.

¹ SUMNER HUBER SLICHTER, *The Turnover of Factory Labor*, New York: D. Appleton-Century Company, Inc., 1919.

According to the U.S. Bureau of Labor Statistics, the percentage of labor turnover for all manufacturing industries in the United States in 1937 was approximately 50; while for automotive parts and equipment it was considerably higher.¹

Occupational changes of young workers especially costly to employers. To be sure, a great deal of labor turnover does not involve changes in occupations but merely changes in places of employment, the work being practically the same in the old and new positions. This, of course, is expensive to employers but it is not the matter with which this chapter is most concerned. Changes in occupations are much more expensive than mere changes in places of employment, both to the employers and to the workers themselves. Moreover, changes in occupations are much more common with younger than with older workers, as has been shown by numerous studies. The situation is, then, that labor turnover is much greater among young workers than among adults, and that a larger per cent of turnover among young workers is of the more expensive kind from one occupation to another.

Possible reductions in labor turnover through vocational guidance. It cannot be assumed, of course, that vocational guidance would eliminate labor turnover. It is to be expected, however, that anything like adequate assistance in choosing, preparing for, entering upon, and progressing in vocations would make substantial reductions in the number who change from one occupation to another. For example, in case of the telephone company already referred to, which reported a turnover of 70.3 per cent among its switchboard operators in 1926, dismissals accounted for 9.1 per cent, disability (revealed or developed after employment began) for 8.2 per cent, employment reasons (unanticipated objectionable features of the work) 12.6 per cent, and "leaving city" (often given to cover real reason) for 11.5 per cent. Nearly three-fifths of the turnover was included in these four groups, each of which must have contained many who would never have entered the employ of the company if they had had proper vocational guidance. No doubt other groups also included some of this type. Even a reduction of turnover from 70.3 per cent to 50.3 per cent would have meant a saving of more

¹ U.S. Bureau of Labor Statistics, *Monthly Labor Review*, XLVIII (January, 1939), 198.

than \$50,000 to the company in costs of hiring and training new operators. This is based on the company's estimate of \$75 per operator for hiring and training. When it is remembered that only one department of a single company has been considered here, there can be little doubt that the financial advantages to the business and industry of that city from an adequate program of vocational guidance would be many times larger than the costs of such a program.

Costs of failure to meet this need finally borne by society. It must not be inferred, however, that employers bear permanently all the costs of these wasteful methods of entering occupations. In the main, the costs are promptly passed on to society in the form of more expensive products or service. As well as first-class products, there are "seconds" to be disposed of, and often worse than seconds, and the number of seconds is increased by heavy labor turnover. Whether these inferior products are sold for less than cost of production or whether they are sent to the scrap heap, the difference between the cost of production and what is received for them usually is added to the selling price of the first-class products. The public pays. However, an individual producer cannot go much farther than the mass of producers in the same line in adding such charges, else he would be unable to dispose of his product. This is but another way of saying that costs of production much above average, whatever the cause, must be paid for out of profits or capital or both.

It may be added that in periods of economic expansion labor turnover among adult workers, with its economic loss to society, is undoubtedly much heavier than it would be had these workers not developed the habit of shifting from job to job in their youth.

Need for vocational guidance from the health viewpoint. Another aspect of the economic waste involved in present methods of entering occupations appears in the effects of unsuitable occupations upon the health of workers. This is very patent in case of the person with tubercular tendencies whose work is done indoors where the air contains many particles of dust. Either his life is shortened and, therefore, his productive period; or he is obliged to give up work for months or even years while regaining his health. In either case he is, during his illness, not only a nonproducer but a drain upon the production of others. Formerly an economic asset, he has become an economic liability.

Sometimes it is a weak heart that gives way under a heavier strain than should have been put upon it, or delicate eyesight is injured by work that is finer or more prolonged than should have been undertaken. More often the nervous system is shattered by efforts to maintain a speed of production beyond its capacity, or to adjust itself to a disagreeable environment. The American woman in the shirt factory, already mentioned, appeared conscious of her inferiority to her Italian neighbor and apparently was striving desperately, with many unnecessary motions, to overcome it. Her nervous system was under a very heavy strain while her Italian neighbor worked as placidly as a cow feeds in the pasture. It seems probable, also, that the one whose work is not suited to him is more often the cause of accidents resulting in injuries to himself or others and consequent economic loss.

The personal and social values of vocational guidance. Entirely aside from financial considerations, and in some respects more fundamental in importance, there are other great advantages to be derived from effective vocational guidance. The worker's happiness and satisfaction in his work, his personal development, his value as a social unit, and his contribution to human welfare all are involved. Certainly no occupation can be considered entirely suitable over a considerable period of time which does not serve these ends. In fact, it is entirely possible that the time is not far distant when the principal criterion of suitability of an occupation will be its ability to contribute richly to the individual's development along socially desirable lines.

Certainly, also, social usefulness of the individual is at issue here. Neither the individual who is failing in his work because he is unsuited to it nor the one who is getting on but dislikes his occupation and goes through life feeling that he has missed his calling is as valuable a member of society as the one who finds that his work is interesting and satisfying and suited to his ability. It is from those who have made repeated failures that the group of social derelicts, known as the unemployables, is recruited in our large cities. Each failure in the experience of a young worker increases the probability of another. Even failure in one occupation is often demoralizing, especially if it has been preceded by a long period of preparation.

A graduate in law from a well-known university obtained employment immediately after graduation in a large law office in Chicago. Within a few weeks he married the girl who had worn his engagement ring throughout his law-school days. Naturally buoyant, companionable, and kindly, he was a good neighbor and a good citizen. At the end of the first year his employers discharged him and advised him to enter some other occupation, since, in their judgment, he never would succeed as a lawyer. Unwilling to give up after so long a period of preparation, he obtained employment in another law office, only to repeat his previous experience. Badly in need of money, he was willing to do any kind of work that paid well. He became a lathe hand on the night shift in a manufacturing plant. During these experiences certain of his characteristics changed decidedly. He became despondent, morose, sullen, antisocial. Stinging under the sense of failure, he moved to another part of the city where he could more easily avoid his old friends. Only after several years which brought him a fair degree of success along mechanical lines did he recover, and then not fully, his former disposition and become again a really wholesome social unit in his community.

Those who go through life doing, with a fair degree of success, work that is distasteful and unsuited to them are constantly subject to a friction that irritates and tends to make them dissatisfied, disgruntled members of society. The load seems to pull harder and causes greater weariness because of the friction. Some find relief and satisfaction in an avocation which they carry on during leisure hours. More turn to recreation for satisfaction and come to look upon their work merely as a means of earning money enough to pay for a good time outside of working hours. Many become grouchy and faultfinding in their places of employment and in their homes. In the industrial field these are ready fuel for the fires of industrial unrest and disturbance. In business occupations and the professions they are likely to be centers of discontent and pessimism. Wherever they are found, they are far more often social liabilities than are those who have "found their work." The English novelist Hutchinson gives a good illustration of this in the character of the heroine's father in *This Freedom*.

Vocational guidance a means of utilizing human potentialities. Again, vocational guidance is needed for the purpose of aiding in the discovery of potential genius, and even potential capacity on a lower level than that of genius, in order that society may be most fully benefited by these. To what extent human progress has been delayed by failure to discover and use potential genius it is, of course, impossible even to estimate. But that a great deal of such genius remains undiscovered in every generation is generally accepted as true. This idea is given poetic expression in Gray's "Elegy in a Country Church-yard":

Full many a gem of purest ray serene
The dark unfathomed caves of ocean bear.
Full many a flower is born to blush unseen
And waste its sweetness on the desert air.

Some village Hampden that, with dauntless breast,
The little tyrant of his fields withstood,
Some mute inglorious Milton here may rest,
Some Cromwell guiltless of his country's blood.

It is a well-known fact that the special aptitudes of some of the world's greatest artists have been discovered by chance. This was true of Caruso, the great tenor, for example. How great would have been the loss to this country and to the world if Lorado Taft, by an unfortunate chance, had devoted his life to law instead of to sculpture; or Carl Sandburg had taken up engineering instead of being a writer; or Thomas A. Edison had become a teacher instead of an electrical inventor! And yet our present haphazard methods of entering occupations must leave other Tafts and Sandburgs and Edisons undiscovered, filling relatively unimportant positions in the world's work and failing to make the splendid contributions of which they are capable to the world's art or literature or mechanical progress. What a multitude of individuals of lesser capacity there must be who are contributing to human happiness and progress only a fraction of what they might contribute in other occupations which would call forth the best they have in them! Society's loss through failure to discover potential genius and capacity is inestimable.

The same idea was well expressed by the columnist O. O. McIntyre when he wrote on frustration in small towns:

I talked to a despairing fellow today whose soul seems to have died within him. He has lived to experience the futility of his most cherished ambitions. I frequently in such exigencies think of my home town and how many worthy, talented people, tied by circumstance, have never been able to do the things of which they were capable and longed to do. Many a fine actor, musician, dancer and author is literally buried alive in your town and mine.

Exploitation of vocational guidance indicates consciousness of need. Not only the need for vocational guidance but also a strong sense of this need on the part of many individuals is shown by the success of quacks and charlatans in the field. Astrology, graphology, phrenology, and physiognomy all have played, and still play, their parts in this game of exploitation. One insists that he can tell by studying the conformation of the stars at the time of an individual's birth what the characteristics of this individual are and, therefore, what occupation he should follow. Another uses for the same purpose the individual's handwriting; a third, the shape of one's skull; and a fourth, one's profile, complexion, texture of skin, and other physical characteristics.

Increasing need. The need for vocational guidance becomes greater each year because of rapidly changing economic and social conditions. There has been an enormous increase in the number of occupations, each with its peculiar requirements and opportunities, since the opening of the present century. The automobile industry, aviation, and radio alone account for hundreds of these. The requirements and opportunities of many fields of work have been greatly modified because of new scientific knowledge and inventions. This is true even of so old an occupation as that of the physician. Some occupations have declined in importance or all but disappeared completely. More often than ever in the past, technological changes in industry require adult workers to seek places for themselves in new and different kinds of work. About twenty years ago the writer observed many wood workers busily engaged in making refrigerators in a large factory. Today that same factory makes electrical refrigerators in which metal has replaced wood.

All these and other changes, such as the later age at which employment is begun and the lengthened period of unemployment after leaving school, intensify the need for help to individuals, especially to youth, in finding their way into suitable places for themselves in this ever more complicated labyrinth of occupations.

Along with the increasing complexity of the occupational world has come a decrease in the informal, unorganized opportunities to become informed about occupations and their requirements. The actual activities of industry and business, shut in as they are by the walls of great factory and office buildings, have become more remote from the daily lives of boys and girls. Youth unaided have fewer opportunities to see what workers do and under what conditions they do it. Parents are less able, largely because the problem has become so much more complicated by the multiplication of occupations and by the changing of their requirements, to give their children the needed information upon which to make wise vocational plans.

Studies of vocational choices made by youth who have had no organized vocational guidance show that the great majority of choices are within a very narrow range. The percentage of girls who choose teaching, clerical work, and nursing is much greater than the percentage of women employed in these occupations, while many excellent occupations for women are missing from the list. A similar situation prevails in case of boys' choices except that the number of occupations upon which their choices center is somewhat larger.

Menger¹ found that 30.2 per cent of the nearly 10,000 girls included in her study, ranging from third grade through college, chose office work—stenographer, secretary, bookkeeper, typist; 29.6 per cent, teaching; and 9.9 per cent, nursing. Thus three occupations accounted for approximately 70 per cent of the choices. In case of the 9,425 boys included in the same study, engineering claimed 14.1 per cent; aviation, 10.3 per cent; medicine, 9.6 per cent; law, 8.3 per cent; education, 4.1 per cent; business, 4.1 per cent; mechanics, 3.7 per cent—a total of 54.2 per cent in seven occupations. That many girls and boys included in Menger's study made their choices on the basis of inadequate

¹ CLARA MENDER: *The Significance of Vocational Choices*, p. 62, New York: Privately printed, 1932.

information is evidenced by the fact that among those retarded two years in school 17.1 per cent of the girls chose nursing; 12.9 per cent, the work of a stenographer; and 11.4 per cent, teaching; and 13.4 per cent of the corresponding group of retarded boys chose engineering; 8.9 per cent, law; 8.4 per cent, education; and 7.1 per cent, medicine. Certainly few of these occupations can be considered suitable for so large percentages of those who are two years retarded in school.

Harris¹ concluded, more than 15 years ago, from his study of 800 literary college freshmen at the University of Michigan that approximately one-half of those who had chosen occupations had done so with very inadequate information. More recent studies at Stanford University indicate that probably half of those who have made a choice by the freshman year of college will change that specific choice at least once while in college. And without assistance in finding the needed information upon which to base a choice the task of finding it becomes ever more difficult, for the reasons already given.

It is also true that there are fewer opportunities for youth under eighteen or twenty years of age to try out or explore occupations by obtaining actual experience in them than was the case a single generation ago. Then it was possible for children to begin employment at fourteen years of age and they did so in large numbers, some of them even becoming apprentices. About twenty-five years ago there were 59,000 employment permits in effect in New York City for boys and girls under sixteen years of age. Objectionable as this child labor was for other reasons, it did give workers a chance to try out a number of different kinds of work while their earnings were still small and there was no hurry for them to "settle down" at a more or less permanent job. It was a wasteful method, to be sure, but it did help many a young person discover early his fitness or unfitness for certain types of work.

Now full-time school attendance up to sixteen years of age is a common requirement, and there is a possibility that this will soon be extended to eighteen. Indeed, some states already require attendance to eighteen years unless employed. But even where

¹ W. L. HARRIS, "The Problem of Vocational Guidance and Placement in the University of Michigan," p. 34, unpublished doctor's dissertation, University of Michigan, 1924.

not required, a large percentage of youth remain in school till eighteen years of age or older. At the same time there has been a growing tendency (for reasons which need not be discussed here) to bar youth under eighteen from wage-earning occupations except of a type that has little exploratory value. The result is that opportunities for a youth under this age to obtain vocational exploratory experiences that are worth while in actual employment have become extremely meager. If he obtains such experiences at all it must be after he reaches eighteen, by which time the economic disadvantages of such a method of finding a suitable vocation make it very wasteful.

Another factor related to the increasing need for vocational guidance, though not evidence of it, is the growing amount of information available concerning individuals. Since wise vocational guidance is based upon knowledge of the person who is guided, any additions to this knowledge make such guidance more practicable and increase society's responsibility for providing it. Introduction of intelligence testing into the schools; health examinations and the records of them; the development of more adequate methods of noting and recording special aptitudes, limitations, and personality traits; and the rather limited progress made as yet in testing these characteristics (all of which will be given attention later) have made available much additional personal data which are significant in this connection.

Factors affecting need for other kinds of guidance. It is obvious that the need for other forms of guidance has increased during the past few decades in much the same manner as that for vocational guidance. Statistics show that 35 years ago American high schools enrolled only a little more than 10 per cent of the youth of high school age, while today they enroll nearly 70 per cent. This means that a much wider range of abilities and interests is found in the high schools today than 35 years ago. Here is evidence at once of the necessity for a more varied program of high school subjects, in which respect some progress has been made, and of more assistance to the individual pupil in selecting subjects from this program.

Recreational opportunities, as discussed in Chap. II, have increased in similar manner. In fact, the people of this country have become recreation-conscious in an astonishing way within a generation. Whether popular interest and participation in the

many different kinds of recreational opportunities available will produce more wholesome than unwholesome results depends increasingly upon the quality of organized recreational guidance provided for youth and adults.

Increased opportunities to participate in unpaid community service activities have not been accompanied by a corresponding increase in interest in and enthusiasm for such activities. In fact, of 2,610 college and university graduates who reported to the writer on this subject in 1934, only 25 per cent indicated any participation in these activities.¹ It is believed that as society becomes more complex the need, already great, for this form of guidance, both from the individual and from the social point of view, must inevitably become greater.

Meeting the need for guidance a major social obligation. With so much evidence of an increasing need on the part of individuals for assistance in making the transfer from school to occupational life the problem of providing vocational guidance in a systematic, organized manner has become a major social obligation. That the same is true of the other forms of guidance needs no argument. The remainder of this book will be devoted to consideration of what is involved in providing such guidance and to the methods and techniques that have been found effective in the undertaking.

SUMMARY

More than 2 million youth of various ages and varied education become available each year for employment of some kind, about three-fourths of them for wage-earning employment. These young people face the necessity, before leaving school or very soon thereafter, of deciding what occupations they will follow. Each year also, among those already employed, another army of people, mostly young but many well along in life, find it necessary or desirable to choose new occupations. Numerous studies have shown that chance circumstances more often than well-considered choices determine the occupations entered by most of those who make up these two great groups of people. Thus many enter occupations for which they are definitely unsuited.

¹ MYERS, *op. cit.*, p. 25.

Heavy financial loss to the individual and to the employer often results from such unwise occupational choices. Much of the economic waste involved in labor turnover is accounted for in this way. Similar losses occur when an individual remains longer than he should in any particular occupation. Usually these losses are passed on to society as a whole in increased costs of products and services. Sometimes the health of individual workers suffers from unfortunate occupational choices.

Social waste results, as well as economic, because workers who are unsuited to their occupations, failing to find satisfaction in their work, more often become social liabilities and because also they fail to make their possible contributions to social welfare, since some of their finest capacities are not called into use in the work they do.

On account of the constantly growing complexity of industry and business, with more and more different kinds of occupations, the need for assistance in choosing occupations increases year by year. Along with growing complexity of the occupational world has come also a decrease in opportunities for youth to gain reliable information about occupations by such informal methods of earlier days as observation of people at work and exploratory experiences through part-time employment.

Related to these conditions is the fact that constantly better facilities are becoming available for obtaining the required information concerning individuals and concerning occupations that is required in providing youth with organized assistance in making suitable occupational choices. Thus meeting the needs of youth for vocational guidance has become a major social responsibility.

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CHAPTER V

THE SCHOOL SYSTEM'S RESPONSIBILITY FOR VOCATIONAL GUIDANCE

The schools' favorable position for this work. In the discussion that precedes, it has been implied again and again that the public school system is the proper agency for providing vocational guidance. Something more specific needs to be said on this subject.

Among the questions that arise are: Why should this heavy load be placed on the schools which are already overloaded with their regular instructional program? Why not let the home and other interested social agencies perform this task? If it is granted that the schools should do something about vocational guidance, why not let them do only that part of the job which can be carried on easily in connection with their traditional work, and leave the rest to other agencies? If vocational guidance is divided among different social agencies, what part shall be done by each, how can the work be coordinated, and which agency shall be responsible for leadership in the coordination?

Much can be said in support of the position that the school system is in a more favorable position than any other social agency in the community to organize and carry on an adequate program of vocational guidance.

Nearly all the children of the average community attend the public schools. They are in attendance at the age of adolescence when they begin to think more seriously of the work they would like to do, and when the majority, as their school days draw to a close, are approaching the time when they must make some decision as to the first job at least. The school system has, or should have, more complete and reliable information concerning the qualities and characteristics of the boys and girls of the community than any other agency. If it does not have all the needed information of this kind, at least it is in better position to obtain such as can be obtained—information concerning

health and scholarship records, general intelligence ratings, social and moral qualities possessed by pupils, and the like. The school system either has the organization or can readily develop one, required to gather the necessary information concerning occupations. It can also obtain readily other data of this character brought together by such agencies as the public employment service.

The public has confidence in its schools and in their desire to render a genuinely fair-minded, disinterested service. What is more, the public has been placing upon the schools in recent years more and more responsibility for the welfare of its children and youth; witness health inspection, physical education, and vocational education. No other agency in the long list of those interested in youth problems would be so readily trusted with this added service to youth.

An educational program incomplete without vocational guidance. Finally, vocational guidance is an integral part of an adequate program of public education. Such a program is wholly impossible without vocational guidance and cannot be separated from it. In an earlier chapter it was shown that vocational guidance, in addition to helping youth find their way into suitable vocations, is a part of pupil personnel work and that as such it is concerned with helping the pupil to find his way into the opportunities of the school so that he will derive therefrom the optimum of that individual development called education. In Chap. I it was noted that as long ago as 1924 the writer called attention to this essential place of vocational guidance in an educational program, pointing out that it is not something added to that program but rather an integral part of it;¹ just as truly a part of it as teaching history or mathematics and often more vital to the pupil's satisfaction in life and to his contribution to society.

The same idea was stressed later by Inglis, though in terms with which the writer cannot wholly agree. According to Inglis:

If the foregoing is a true statement of what our system should be concerned with, we see clearly that when we consider the question of guidance we are considering not something which is to be added to

¹ GEORGE E. MYERS, "A Critical Review of Present Developments in Vocational Guidance with Special Reference to Future Progress," *The Vocational Guidance Magazine*, II (March, 1924), 139.

education, not something which exists outside, but something which is really in the very center of education itself. When we speak of guidance, therefore, we are speaking of an integral part of education, one of the most important parts of it.¹

Inglis goes on to say:

The point I am trying to make is that vocational guidance or any other form of guidance is not something apart from education as we ordinarily consider it, but rather that we have made the mistake a great many times in the past of limiting our thinking to a kind of education which excluded the important elements of *learning* the pupil and then helping him to find his ability, helping to guide him. That is why we think of vocational guidance, of guidance in general, as something quite apart from the school instead of being a part of it. We find a dangerous tendency on the part of some who have not thought deeply to regard vocational guidance as a piece of machinery added to the regular administration of work in the school, and educational guidance as a matter of advising a child rather than fundamentally a matter of education itself.

Cooperation of other social agencies necessary. When responsibility for a comprehensive program of vocational guidance is placed at the door of the school system, this does not mean that other social agencies should be expected to make no important contributions to the program. It does mean that leadership in vocational guidance belongs to the schools as part of the service which the community has a right to expect from them. It means that working out the plans, directing their administration, and checking up on results belong to the schools. It is to be expected, however, that the department or bureau of the school system that is charged with this responsibility will secure the cordial cooperation of other social agencies of the community. In fact, an adequate program is impossible without such cooperation.

Typical cooperating agencies. Above all, the school will naturally seek the cooperation of the home in attacking this important problem. Such organizations as the chamber of commerce, the men's and women's service clubs (Rotary, Kiwanis, Canopus, Exchange, Lions, Altrusa, Quadrangle, Zonta, Business and Professional Women's Clubs, and others), general women's

¹ ALEXANDER J. INGLIS, "Vocational Guidance in Secondary Education," *The Vocational Guidance Magazine*, IV (October, 1925), 3.

clubs, parent-teacher associations, Young Men's and Young Women's Christian Associations, Boy Scouts, Girl Scouts, Camp-fire Girls, Future Farmers of America, 4-H Clubs, and Hi-Y Clubs should have a part in the program. Some of these are youth organizations designed to promote the interests of their members. Others are organizations of adults that already have shown an interest in youth problems or that need only tactful leadership from the schools in order to develop such an interest.

There is also a group of public and semipublic agencies dealing more or less directly with youth—the public library; playground and recreation departments; health departments; juvenile courts; local offices of the Civilian Conservation Corps, National Youth Administration, and state employment service; newspapers; local radio stations; and the like—from which the school guidance department should obtain cooperation.

A plan of cooperation with agencies of the community desirable. A logical approach to the task of obtaining the greatest help from the many possible allies of the schools in promoting a vocational guidance program in any community is to prepare a list of such organizations and agencies in relation to the eight services which a comprehensive program of vocational guidance undertakes to provide (outlined in Chap. VII and discussed at length in later chapters). A second step is to determine the service or services in which each agency can be of greatest assistance. The next step is to set up such relations between the school guidance organization and the various agencies that each agency can best contribute to performance of the service or services in which its help is sought. Of course, the second and especially the third of these steps can be taken successfully only with cordial cooperation between the school guidance organization and each particular agency concerned. Carefully chosen representatives of the two groups must be expected to work out these steps together. The fourth and final step is to keep these relationships functioning successfully. A community guidance council in which all cooperating agencies are represented but in which the school group is the recognized leader may well perform this function.

Illustration—cooperation with the Boy Scouts of America. An illustration of the possibilities of cooperation with one of these agencies may not come amiss at this point. The one chosen is

the Boy Scouts. This organization already is doing a considerable amount of valuable vocational guidance work with its members. Advancement in the organization from rank to rank comes through passing certain tests and winning merit badges, of which there are more than 100. One set of tests must be taken in advancing from tenderfoot to second-class scout. Additional tests are required in order to become a first-class scout.

A first-class scout becomes a star scout by winning any five merit badges. Ten merit badges are necessary in order to become a life scout, five in required and five in optional activities. In order to attain the coveted rank of eagle scout a boy must win 21 merit badges, 9 of which are in optional fields. Beyond this, additional honors, the Bronze, Gold, and Silver Palm, may be attained by winning additional merit badges. Among the required activities are personal health, public health, camping, bird study, pathfinding, and pioneering. The optional activities include blacksmithing, printing, seamanship, surveying, forestry, radio, botany, astronomy, and many others of this general type. In order to win a merit badge in radio, for example, the scout must master certain technical information, do a specific radio job, and read in the scout booklet on radio about the vocational opportunities and requirements in this field.

It is clear from the above that the Boy Scout may explore in a variety of vocational, recreational, and community-service fields. He may obtain a considerable amount of information about these fields that should be useful to him in selecting his vocation and his recreations. He may acquire a better understanding of his own interests, aptitudes, and limitations. He may reveal to his troop leader important information concerning his personal assets and liabilities. His troop leader may be very helpful to him as a counselor.

Now, what relations should the school guidance program have with the Boy Scouts? Leaders of the school guidance work should know what the scout activities of the community are. The school record of each boy who is a scout should show this fact, the progress he has made in scouting, and the list of activities in which he has obtained merit badges. The school counselor, with all the school records to aid him, might assist the Boy Scouts of his school to select more wisely the activities in which to work for merit badges. Arrangements should be made

with scout leaders to report to school guidance workers information concerning special interests and aptitudes shown by their boys; also concerning health, temperament, and personality characteristics as revealed by these boys in scout work. At times the school counselor may well call upon a boy's scout leader, who, he knows, has the boy's confidence and respect and is otherwise qualified to counsel that boy on educational, recreational, vocational, and community-service matters.

Scout leaders of the community should be kept informed as to what the school guidance program is and what it is trying to do. Briefly, what is needed is a better mutual understanding by these two groups of each other's objectives and program; recognition by the school of the rich exploratory values of scouting, especially when carried to the rank of eagle scout; transfer of helpful information obtained under the favorable conditions of scouting to the school counselors; and cordial cooperation in supplying scouts with information concerning opportunities and with counseling.

Making vocational guidance a community undertaking. A similar study of each of the organizations and agencies listed earlier in this chapter, and others of like nature that are found in the community, should be made if vocational guidance is to become a community enterprise with school leadership. Probably it will be found that service clubs can be most helpful in bringing public support to the guidance program, in providing information concerning particular occupations, in offering vocational exploratory experiences, and in placement work. The public library's largest service may well include bringing together, making readily accessible, and encouraging the use of well-selected information concerning vocations. The Y.M.C.A., Y.W.C.A., and similar organizations may well serve to best advantage in the follow-up part of the program.

School leadership fundamental. Obviously if vocational guidance is to become a *community enterprise which centers in the schools*, much careful planning and wise leadership are necessary on the part of the school officials in charge of the program. The quality of educational statesmanship required for this task and the expense involved may well cause school officials to hesitate about undertaking it. But no other social agency or institution is in position to cope with the problem as a whole. If the school

system rises to its responsibilities in this matter, a well-rounded, well-coordinated program of vocational guidance which really meets community needs can be developed.

SUMMARY

Major responsibility for providing youth with needed vocational guidance rests upon the school system. It has charge of the great majority of youth in the average community at the time they are most in need of vocational guidance. Better than any other agency of the community it is in position to assemble information concerning the qualities and characteristics of youth. It can bring together the needed occupational information and use this to best advantage. The public has confidence in its schools and in their desire to render a genuinely fair-minded, disinterested service. The public has been placing more and more responsibility on the schools for the welfare of children and youth. An adequate program of public education is impossible without vocational guidance.

However, the school system cannot do this job unaided. Acting as responsible leader, it must seek and obtain the cooperation of many other social agencies. Among those agencies are youth organizations, adult organizations interested in youth, public and semipublic agencies which deal more or less directly with youth. The vocational guidance department of the school system should see to it (1) that a list of all possible cooperating agencies is prepared, (2) that the ways in which each such agency can make its best contribution are studied, (3) that a plan is worked out cooperatively by which each agency can make this contribution, and (4) that the cooperating relationships continue to function successfully.

Vocational guidance thus becomes a *community enterprise* which centers in the public schools.

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CHAPTER VI

THE CONTRIBUTION OF ELEMENTARY EDUCATION TO VOCATIONAL GUIDANCE

It is generally recognized that vocational guidance in a school system is primarily a problem of the secondary school, including in this term the junior and senior high school and the junior college. Most of the remaining chapters will deal with techniques and methods used in performing the various services which make up a comprehensive program of vocational guidance in secondary schools. But before taking up a detailed discussion of these services it seems desirable to consider what contribution, if any, organized elementary education—education for which provision is made in elementary schools—should be expected to make to vocational guidance.

In the discussion that follows, the term “elementary education” will be used to include the work of the first six grades only. The seventh and eighth grades will be considered as belonging, with the ninth, to the junior high school period of education, even though in many school systems the junior high school organization has not yet been perfected.

Objectives of elementary education. Any attempt to determine the contribution that elementary education should make to vocational guidance must be undertaken with the objectives of elementary education clearly in mind. Most of the well-known statements of educational objectives were formulated in terms of organized education as a whole rather than in terms of the work of elementary schools, secondary schools, and higher educational institutions separately. This is true of the seven cardinal principles (or objectives) of education enunciated more than twenty years ago by the Commission on Reorganization of Secondary Education of the National Education Association: “(1) health, (2) command of the fundamental processes, (3) worthy home-membership, (4) vocation, (5) citizenship, (6) worthy use of leisure, and (7) ethical character.”¹ It is equally

¹ *Cardinal Principles of Secondary Education*, U.S. Office of Education Bulletin 35, Washington: Government Printing Office, 1918.

true of the more recent grouping and elaboration of educational objectives under four heads by the Educational Policies Commission, namely:

1. The objectives of self-realization.
2. The objectives of human relationship.
3. The objectives of economic efficiency.
4. The objectives of civic responsibility.¹

Obviously, certain objectives are applicable alike to elementary school, secondary school, and higher educational institutions, though with varying emphasis at different levels. On the other hand, some, including the vocational objective especially, do not appear at the elementary level. The objectives of education as provided for in the elementary school period itself have been variously stated by different authorities. These objectives may be summarized briefly as follows: to help all children acquire common tools with which to work (command of fundamental processes) and to develop in these children fundamental habits, ideals, attitudes, methods of procedure, and appreciations that will be useful to all as individuals, as citizens, and as consumers.

Thus elementary education deals with those things which are the common need of all without regard to sex or occupation. It is concerned primarily with the things that tend to unify or integrate people rather than with those that tend to differentiate them.

Relation of these objectives to vocational guidance. Accepting the validity of these objectives, the way is cleared for consideration of the subject of this chapter. On the surface it may appear that no contribution from elementary education to vocational guidance should be expected. Vocational guidance is not mentioned in any way in the objectives. Since the elementary school is concerned with the common needs of all, its function is to help all pupils toward the same general goal. As noted in an earlier chapter, some may travel faster and go farther than others but all are headed toward a common destination as far as the elementary school is concerned. Vocational guidance, on the other hand, while part of an educational program, consists of a group of specialized services which are based upon individual

¹ *The Purposes of Education in American Democracy*, p. 47, The Educational Policies Commission, Washington: National Education Association, 1938.

differences and is concerned with helping individuals toward different goals. True, elementary education also takes account of individual differences. But it is interested in these differences primarily from the point of view of methods and content of teaching in order that each pupil may progress as rapidly as possible in the direction desired for all.

A more careful examination, however, gives rise to the question: May not some of the materials used in the elementary schools for the purpose of helping all to obtain what for want of a better term is called "general education" on the elementary level have important vocational guidance values?

Why study the industries in elementary grades? In attempting to answer the question of the last paragraph, it seems wise to consider at some length the place of one group of man's productive activities in accomplishing the purposes of elementary education. Let us take the group known as the industries, defining this term in its narrower sense as including only those occupations devoted to making changes in the forms of raw or partly manufactured materials in order that they may be more useful to man. Agriculture, mining, trade, transportation, and the professions are, for the time being, left out of account.

As long ago as 1909, Dean Russell,¹ criticizing severely the handwork then done in the name of education, presented the case for systematic study of the industries in the elementary school. Part of his argument, with some modifications and illustrations by the writer, follows.

A scientific element added to the humanistic element in elementary education. In addition to the "three R's," or the tool subjects as they are sometimes called, education long ago introduced a humanistic element into the schools for the purpose of developing the child in the direction of adjustment to his social environment. This consisted of literature, history, geography, music, art, and the like. Later, with the wonderful development of science, it became necessary to introduce a scientific element for the purpose of helping to adjust the child to his physical environment. Among the subjects included in the scientific element introduced into the elementary schools are nature study, hygiene, and elementary general science. For example, as long

¹ JAMES E. RUSSELL and FREDERICK G. BONSER, *Industrial Education*, New York: Teachers College, Columbia University, 1914.

as it was the accepted belief that sickness was an act of Providence, hygiene had no place in the schools. But when medical science revealed the real nature of sickness and disease, particularly of the communicable diseases, such as typhoid fever and tuberculosis—showing that they are caused by germs, how they are transmitted from the sick to the well, how to avoid contracting them, and the like—then a body of subject matter in hygiene, of vital importance to the child in his relations with his physical environment, found its way into the schools.

An industrial element necessary also. Along with the scientific development, and partly as a direct result of it, has come the most remarkable industrial development the world has ever seen. Work that formerly was carried on in the home or in the little village shop, where children could see what was done, how it was done, and under what conditions (in many cases helping to do it), has been transferred to great manufacturing plants employing thousands and even tens of thousands of workers. From processes performed slowly and carefully by hand, industry has changed to processes performed by intricate and powerful machines with tremendous rapidity. Age-old industries have been revolutionized and new ones have been developed, and both have been shut in behind factory walls with a “no admittance” sign over the door.

Take, for example, the manufacture of woolen clothing. In colonial times, and even later, most children saw sheep feeding in the pastures and saw them taken to the brook in the spring of the year to have their fleeces washed. Later they saw the fleece sheared from the sheep and saw the wool carded, spun into yarn, woven into cloth, and made into garments, some of which kept them warm in winter. What does the average boy or girl know today, from actual observation, about the making of woolen clothing? He knows how it looks, how it feels, that it is purchased at the store, and that it keeps him warm. He knows little or nothing by experience about where wool is grown or how. He knows nothing of the processes of washing the wool, carding, combing, spinning, weaving, and finishing, as these are carried on in the great woolen mills of today, nor of the modern methods of making the woolen goods into garments. He knows nothing of the conditions under which the work is done, little of the importance of the woolen industry in the life of his time, and

very little of the artistic or wearing qualities of products of the woolen mills and clothing factories. The same is true of other industries.

Social and political significance of industrial element. And while the modern factory system has deprived our children of the opportunity to see how the industries are carried on, these same industries have come to occupy a larger and more important place in the social, economic, and political problems of the city, state, and nation than ever before. The big questions that occupy Congress and the state legislatures and enter into the political campaigns are largely questions growing out of modern industry. Among them are the tariff on manufactured products in order to protect against foreign industrial competition; anti-trust laws to prevent big industrial organizations from becoming too powerful and stifling competition; workmen's compensation laws; factory inspection laws; child labor laws; unemployment compensation laws; laws governing hours of labor, minimum wages, strikes, lockouts, and housing conditions in centers grown congested because of industry; and so on through a long list.

There is, therefore, abundant reason why, in order to help adjust children to the large and tremendously important industrial environment which surrounds them, an industrial element should be added to the humanistic and scientific elements already introduced into elementary education. Most children will find this industrial material, when properly presented, quite as interesting, quite as easily mastered, and quite as worth while, from the point of view of general education, as much of the material now offered in other school subjects. For instance, a study of the automobile industry, its place in the development of the country, our dependence upon it today, the principal automobile manufacturing centers, the processes of manufacturing automobiles, conditions under which the men work and live, uses of the different kinds of automotive vehicles, etc., can be made very interesting and valuable to a boy of ten years.

The purpose: general education. It should be understood, however, that the study of the industries under discussion has for its purpose general education. It does not aim to make electricians, or carpenters, or plumbers any more than the study of art or music in the elementary schools aims to make artists or musicians. It seeks to give an understanding and appreciation

of the most essential things involved in the work done by large numbers of our people—work out of which arise many social, economic, and political problems. The product sought is more completely developed individuals, better citizens, and more intelligent consumers, not skilled mechanics. This general educational purpose is well expressed by Bonser and Mossman:

The materials, processes, conditions of production, and the purchase and use of the products of the more important industries may be studied for the values which such study affords in one's everyday life, regardless of his occupation. Such a study of industrial arts, we describe as "general." To realize its purposes, we make no attempt to develop any considerable degree of skill in any of the several industries studied. Productive skill is not included in its purposes as it is in vocational education. The field includes numerous industries, not limiting itself to one industry as in vocational education.

The purposes or outcomes of the general study are realized in the degree in which it helps one to become efficient in the selection, care, and use of the products of industry, and to become intelligent and humane in the regulation or control of industrial production. This study is from the point of view of the problems, opportunities, and obligations of the consumer and the citizen.¹

Principles governing selection of industrial material for the elementary grades. When one attempts to select the industries that should be given attention in the elementary school, he finds himself confronted with an embarrassment of rich material. His problem is not to find enough but to select the best from the wealth before him. His guiding principle in selection must be relationship to the objectives of elementary education. Bonser and Mossman have expressed this well.

That field of industry comes first which has the largest relationship to the common needs of life. Those industries having least relationship to the common needs of life would be omitted, judged constantly, as they must be, from the point of view of the consumer and citizen. By this standard, industries devoted to the production of food, clothing, and shelter would stand at the top of the list, those concerned with the making of walking sticks or artificial limbs would be omitted.²

¹ FREDERICK G. BONSER and LOIS C. MOSSMAN, *Industrial Arts for Elementary Schools*, p. 6, New York: The Macmillan Company, 1927.

² *Ibid.*, p. 21.

It should be noted, also, that not all parts of any industry are of equal value for educational purposes. Selection within the industry becomes necessary. To quote Bonser and Mossman again:

Within any industry, selected because of its importance to life, those parts would be chosen which furnish the greatest help in meeting our common needs. Not all phases of even a single industry may yield values in terms of our purposes sufficient to make it worth while to include them. For example, a study of the materials employed in the clothing industries provides much help in problems of selecting clothing, but developing skill in any of these processes yields little that is measurable by our standards of value.¹

It follows from what has been said concerning the relationship of the material that is chosen to the common needs of life, that the best basis both for selection and organization of this material is the uses of products of the industries.

The large uses of material products center very conveniently for classification about the needs of man for six kinds of service which are respectively: food, clothing, shelter, utensils, records for transmitting experiences, and tools and machines. The subject matter making up such an organization is found largely in answer to two questions: (1) What are the changes made in materials which increase their values to make them most useful and satisfying in meeting these six respective forms of need? (2) What are the problems relating to these changes which concern us as consumers and citizens?²

What provision for such study of the industries? The question naturally arises: Does not such a study of the industries require departmental teaching in the elementary school? Is it not necessary to have a teacher for the industrial arts work who is so well trained in the manipulative and art sides of her subject that she cannot adequately be prepared to teach other subjects of the elementary school also? It is, of course, important that the teacher should be well trained in the manipulative and art sides of industrial arts. It is equally important that she should understand the economic and social aspects of this subject. But it does not follow that industrial arts in the elementary school should be taught by a specialist who teaches nothing else. As most elementary schools are now organized, the subject should

¹ *Ibid.*, p. 22.

² *Ibid.*, pp. 26-27.

have its time allotment in the curriculum in the same way as do the historic three R's and the other standard subjects of the elementary school, and all may be taught, and generally will be, by the same teacher.

If, however, the platoon system of elementary education is accepted, with departmental teaching of some subjects, then a special teacher of industrial arts may be provided. The important thing is that this subject, which touches all others so intimately, should be a unifying factor in the curriculum and full advantage should be taken of the many opportunities to correlate other subjects with it. This is more likely to be done when one teacher has responsibility for all the work of a class, provided this teacher is properly prepared to teach industrial arts as well as the other subjects. A number of school systems have demonstrated the practicability of this procedure in elementary schools by using projects which combine study of industries with reading, writing, arithmetic, geography, and other subjects.

However, details of organization and method need not be considered further. They may safely be left to those whose special field is industrial arts in elementary education. What does concern us here is the place that study of the industries should have and gradually may be expected to attain in organized elementary education and the general character of such study.

Under the names of manual training and household arts, some of the aspects of industrial arts as discussed above have long been accepted as part of elementary education. But the manipulative and process aspects in a very limited number of industries have claimed nearly all the time and attention. Often the work has had little relation to other subjects of the curriculum and less relation to life. In recent years, the tendency has been in the direction of a much broader and more genuinely educative treatment of the subject.

Relation to objectives of elementary education. It is apparent from this discussion that study of the industries in the elementary school not only harmonizes with the objectives of elementary education, but is essential to the realization of these objectives, provided the study is so conducted that it results in desirable changes in behavior

. . . in one's selection, use, and enjoyment of the products of industry; in one's participation in the securing of just and fair treatment for

producers in industry and for consumers of products; and in one's taking an intelligent interest in the processes, products, and workers in industry as changes in these result from the use of new materials and methods.¹

It has been noted that there is a wealth of material for this kind of study from which selection must be made upon the basis of relation to the needs of life. It has been noted that the tendency today in elementary education is strongly in the direction of this type of study of the industries, in place of the older type which emphasized chiefly manipulation in a very limited range of activities, some of which have little relation to the life of the average individual.

Similar study of other fields of activity desirable. There is no good reason, however, why such study should be limited to that field of human activities, broad as it is, which is known as the industries. Agriculture, mining, transportation, trade, the professions, and the other large groups of occupations also have a close relationship to the lives of all of us, as well as have those activities which bring about changes in raw materials in order to fit them for human use. A similar study of these other fields along with the industries is essential to full realization of the objectives of elementary education.

The growing of cereals such as corn, wheat, and oats; of fruits, of vegetables, of fiber crops such as cotton and flax, and of livestock; the extraction of minerals such as iron, coal, copper, oil; lumbering; the transportation of these raw materials of farm and mine and forest; the manufacture of these materials into finished products for human use; the distribution and sale of these products as they come from the factories; and the many kinds of professional, public, and personal service—all these are involved. The extent to which they are involved is determined only by the time that can be devoted to this kind of study and the way the subject matter is organized and presented.

Taken together, these constitute the world's work at which humanity spends more than one-third of its waking hours, by means of which it subsists, and through which are provided the products and services humanity uses and enjoys.²

¹ *Ibid.*, p. 29.

² Said former Dean James E. Russell of Teachers College, Columbia University, some years ago: "I wonder why it is that we teach with such

Surely nothing is more closely related to the needs of life than this material. And, if treated in its broader aspects, nothing is richer in value as material of general education. Here in the world's work, history, geography, community civics, and elementary sciences find their applications and, to a large extent, their motivation. Here also arise the problems of arithmetic and the need for reading and writing. It would be quite possible to make the world's work the integrating factor of elementary education.

Significance of such study for vocational guidance. When elementary education gives to boys and girls such an acquaintance with the world's work as is needed for purposes of general education, it will make all the contribution to vocational guidance that may be expected of it. While the objective throughout is general education, a background of information concerning occupations will be built up which will be of distinct value later when a decision concerning the vocation to be pursued must be made, or when a more comprehensive study of occupations is undertaken for vocational guidance purposes. The information will not be detailed or complete concerning any occupation. It will not deal with requirements for success or opportunities for advancement. It will place different occupations in the scheme of the world's work for the child. It will give him some idea of the nature of the work done in different occupations and of the history, the social status, and the contribution to society of many of the more important occupations. It will build up a subconscious foundation which will determine to greater or less extent the child's later thinking and planning concerning his life work.

Occupational information for guidance purposes not desirable in elementary grades. In his earlier writings Brewer expressed the view that definite provision should be made in the elementary grades for supplying occupational information to children for vocational guidance purposes.¹ To be sure, he was thinking in

complacency the life history of the honeybee and the hummingbird, the brook trout and the woodchuck, and fail to include in our study the life history of the coal miner and the fisherman, the cotton planter and the dairyman, the textile worker and the engineer." "Our Need of an Intelligent Electorate," *School and Society*, XVI (Oct. 7, 1922), 407.

¹ JOHN M. BREWER, *The Vocational Guidance Movement*, New York: The Macmillan Company, 1918.

terms of an educational and social situation quite different from that of today. Twenty years ago pupils left school earlier to enter employment. Also there was somewhat less disposition then than now to make provision for study of the world's work for purposes of general education in the elementary school.

That Brewer's views have changed with the passing years is shown by the fact that his only reference to this subject in his more recent book is, "Vocational guidance may be faint in the picture for the elementary school, but it should be clear for later education."¹ The writer would go further and say that study of occupations in the elementary grades for vocational guidance purposes is neither essential nor desirable. Choice of occupation is a differentiating factor in the lives of children. The elementary school is concerned with those elements of study and experience that are of common value to all, regardless of sex or future occupation. Let the differentiating factors be reserved for a later period of education.

It may be argued that some children leave school at the end of the sixth grade and will have no help in choosing an occupation unless it is provided in the elementary school. Where compulsory education laws are enforced, the number of normal children who leave school without completing the sixth grade is extremely small. Subnormal children constitute a special problem and should be handled in special classes, as they are in most city school systems. What vocational guidance they need, and they need some even though most of them will engage in unskilled work all their lives, can and should be provided in their special classes. In systems too small to maintain special classes for subnormals, the problem should be handled individually without modifying the elementary school work as a whole in order to meet the needs of a few.

Records of pupils in elementary schools valuable for guidance purposes. Another fact that should not be overlooked in considering the contribution of elementary education to vocational guidance is that an adequate record of the pupil's responses to his experiences in the elementary school will provide information concerning his achievements, aptitudes, limitations, and personality traits that should be of value in counseling him later

¹ JOHN M. BREWER, *Education as Guidance*, p. 182, New York: The Macmillan Company, 1932.

regarding his vocational plans. Information from this source will, of course, be considered by the counselor in relation to information of similar type derived from the pupil's secondary school record. Especially important will be the consistency or lack of it between the pupil's elementary and secondary school records. Effective counseling, as will appear more clearly later, depends so much upon adequate significant data concerning the one counseled that the counselor cannot afford to neglect the rich contribution of the elementary school in this respect.

SUMMARY

Education in the elementary grades, aimed chiefly at development of the individual along lines of good citizenship and good consumership, is concerned with the common needs of all regardless of their future occupations. All are traveling toward a common goal though at different rates of speed and with different degrees of success. Vocational guidance, on the other hand, is concerned with helping individuals toward different goals. However, the question arises: may not some of the provisions made for helping all to obtain general education in the elementary schools also have significance for vocational guidance?

For the purpose of helping children to understand and appreciate the ever-expanding industrial aspects of their environment, an industrial element has been added in elementary schools to the older humanistic and scientific elements. Material included in this industrial element is, of course, selected on the basis of its relationship to the common needs of all. The aim is not to make better artisans or to help in choosing an occupation but to make better individuals, citizens, and consumers. Similar material related to other occupational fields—agriculture, mining, transportation, trade, the professions, and the rest—must be used also if the objectives of elementary education are to be realized.

However, the information and experiences acquired by children in the elementary schools as a result of this study of the world's work will serve as a valuable background when those same children later face the necessity of choosing an occupational field for themselves. Thus, while study of occupations for vocational guidance purposes has no place in elementary schools, such study for purposes of general education may make an important contribution to vocational guidance.

Elementary schools make a valuable contribution to vocational guidance also by means of carefully planned, well-kept cumulative records which follow the children as they advance through the secondary schools and are available for the use of counselors.

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CHAPTER VII

THE SERVICES INVOLVED IN A PROGRAM OF VOCATIONAL GUIDANCE IN SECONDARY SCHOOLS

Since we have noted the need for vocational guidance, have stressed the responsibility of the school system for providing it, and have pointed out that elementary schools contribute only indirectly in this respect, it is appropriate to ask what secondary schools should do in providing a comprehensive program of vocational guidance.

After 30 years of thought and experience, authorities on the subject have come rather generally to divide such a program into eight parts, each part concerned with a distinct type of service. The program may, therefore, be thought of as consisting of a group of eight services. An effort will now be made to give a general picture of a comprehensive program of vocational guidance in secondary schools by presenting the eight services which such a program may be expected to perform. A detailed discussion of the different services will occupy later chapters, little more than a definition of each being given here.

A vocational information service. This service is concerned with aiding the individual to obtain needed information concerning occupations. It can, of course, be taken for granted that if one is to choose wisely among the occupations which are open to him he must know about the opportunities and requirements of various occupations, and especially of those that interest him most. Adequate information of this character does not come to one in the ordinary course of schoolwork as it has been carried on in the past nor from his home nor from other out-of-school experiences. Definite provision of some sort for each individual to obtain such information is part of the secondary school's responsibility.

A self-inventory service. This service is concerned with aiding the individual to obtain equally needed information pertaining to his own abilities, aptitudes, limitations, and per-

sonality traits—his personal assets and liabilities. If the individual is to choose wisely he must know not only the opportunities and requirements of particular occupations, but also what he has to bring to any occupation that he may choose. The Socratic dictum "Know thyself" is fundamental to a wise choice of occupation.

A personal data collecting service. The purpose of this service is to provide the basis for the counseling service that follows. It is not only desirable but necessary that one who is to counsel another wisely concerning the choice of a vocation should know the characteristics of the one who is counseled. This requires the bringing together of many kinds of personal data concerning the individual in convenient form for use by the counselor. As will be seen later, much more complete data than are usually found in a school-record system are necessary.

A counseling service. This service is concerned with helping the individual to weigh and evaluate his personal assets and liabilities in relation to the opportunities and requirements of occupations that interest him, and to make plans that are based on resulting decisions. It involves knowledge on the part of the counselor both of the individual's assets and liabilities and of possible courses of action open to him. It consists of an interview or series of interviews between the counselor and the one counseled in which sincere and frank efforts are made to face the facts that should determine decisions and plans.

A vocational preparatory service. This service is based on the assumption that a choice of occupation has been reached, at least tentatively. The problem now confronting the individual is that of making such preparation as is desirable, either before or after actually entering full time upon the occupation chosen. Assistance is needed in determining what preparation shall be obtained and where and in what manner it shall be obtained. Here arises, also, the necessity for society to consider the question of what provision it should make for the vocational preparation of those who enter occupational life. Success in occupational life depends upon how this service, as well as the others in the list, is performed.

A placement or employment service. It is the function of this service to aid the individual who has chosen his vocation and made such preparation as seems practicable to get off to a good

start by entering that vocation advantageously. Assistance is needed in finding a suitable place to start work at a wisely chosen occupation just as truly as in making the choice. Without this assistance the whole program of vocational guidance, dealing, as has been stressed, with transfer from school to occupation, is left up in the air, unfinished.

A follow-up or adjustment service. This service is concerned with aiding the individual to make necessary or desirable readjustments after entering upon his vocation. Even with the best of help he may have chosen his vocation unwisely or begun work under unfavorable conditions. He may find it necessary to work for a time at an unsuitable occupation or he may be wholly unemployed for a number of months. Assistance may be needed in making a new choice either of vocation or of place to work at it, or in making the best use of a period of temporary unsuitable employment or complete unemployment. He may need help in seeing the opportunities that lie ahead, or in planning the further preparation needed, or in adapting his personality to the new environment of working life. Whatever assistance in such matters may be needed belongs to this service.

A research service. Still another service which is essential to the success of a comprehensive program of vocational guidance is that of research. This includes particularly occupational research—the gathering and keeping up to date of information concerning opportunities and requirements of local occupations. It includes, also, evaluating the techniques and methods used in the other services. It is not so much a service to individuals as it is to the program as a whole. It is concerned with checking up on the effectiveness of the other services and with discovering their strong and weak points with a view to strengthening the program.

All these services essential to an adequate program. Some school systems have undertaken to provide certain of these services, while ignoring the others. Usually the services for which provision is made are those which relate most closely to the traditional work of the school and which can, therefore, be carried on with the least additional trouble and expense. Thus, some provision for occupational information, occupational exploration, gathering data concerning pupils, and counseling is more common in American high schools than is provision for the

placement, follow-up, and research services. It is quite logical for school systems to develop their programs of vocational guidance by beginning with those services which can be carried on most easily. Many school systems are doing work that is very worth while with a partial program only. However, school authorities should recognize the fact that no program of vocational guidance can be considered adequate which does not include all of the eight services described above.

Effective performance of each service essential also. Nor does a program of this nature deserve to be called adequate unless the provision made for performing each of the various services is itself adequate. A school system may truthfully report that it has made provision for all of the eight services and yet its program may be very ineffective. In fact, surveys that have been made for the purpose of determining the extent to which vocational guidance has found a place in American school systems have proved unsatisfactory on this account. It is important, for example, not only that vocational counseling be done, but also that it be done by competent persons, on the basis of adequate records, and under favorable conditions; also, that all pupils in the secondary schools be given this kind of counseling. A somewhat similar statement could be made concerning each of the other services. Unless the program really functions from the occupational information service to the research service, it cannot be considered adequate.

In the chapters that follow, the various services will be considered at some length and methods and techniques will be discussed which seem likely to contribute to the effective performance of each service.

SUMMARY

A comprehensive program of vocational guidance in secondary schools is concerned with eight different services: (1) a vocational information service; (2) a self-inventory service; (3) a personal data collecting service; (4) a counseling service; (5) a vocational preparatory service; (6) a placement or employment service; (7) a follow-up or adjustment service; and (8) a research service. If the program is to be highly effective it is necessary not only that provision be made for all of these services but also that each be performed in an efficient manner.

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CHAPTER VIII

THE OCCUPATIONAL INFORMATION SERVICE

With the completion of the elementary school period at the end of the sixth grade come new educational problems. No longer does it suffice for the school to deal only with those things which are the common needs of all regardless of sex and future occupation. To be sure, the school must continue to concern itself with these common needs, but it must take account also of the fact that the paths to be followed by its pupils now begin to diverge toward different goals.

From this point onward individual differences must be considered not only with reference to the content and methods of teaching used for the purpose of helping all to progress as far as possible along a common highway, but also with reference to helping each to select goals suited to himself as an individual and to make progress toward these goals. In no aspect of life do these individual differences stand out more strikingly or have greater significance than in the matter of vocational interests and possibilities. As the child passes from the elementary school to the junior high school, the time has come for the beginnings of more or less definite assistance in making vocational plans.

Occupational information a first step. When direct efforts are made to provide an individual with adequate assistance in making vocational plans, it becomes apparent that the task includes, first of all, acquainting him with information concerning occupations. There may be difference of opinion as to the character of the information needed at different school levels and as to methods of providing it—whether by means of a special course, as part of community civics, by means of theme work in English, as part of the work expected to be done in every subject, or in some other way—but practically all who have given the matter even passing attention agree that occupational information is fundamental in a program of vocational guidance.

Only those who accept, or lean strongly toward, the view that vocational guidance consists in studying the individual and then

telling him what he should do, rather than in helping him to arrive at a decision of his own, place little emphasis on providing for pupil study of occupational information as part of such a program. Some of this group mistakenly seem to assume that those who stress occupational information consider it the whole of vocational guidance and take it for granted that the counselor rather than the one who is counseled needs to know the requirements and opportunities of various occupations in order that he may tell the individual who is counseled whether or not he is suited to this or that occupation.

Certainly if vocational guidance is a matter of aiding an individual by all available means to make his own decisions with reference to his vocation, as the accepted definition of the term implies, rather than that of having a specialist do this for him, the individual himself must know what is required and what to expect in the different courses of action that lie open to him.

Kind of information needed. It is apparent that the kind of information one needs concerning occupations in order that he may make a wise vocational choice depends upon how far he has progressed toward this choice. If he is just beginning to think about the matter, with several years of more or less general schooling still in prospect, the type of information needed will be quite different from that needed if he is on the point either of leaving school to begin wage earning or of deciding just what vocational preparation he should make before leaving school. In the former case a general view of the whole range of occupations is needed in order to help the individual select a field for further study and for exploration.

For example, before junior high school pupils face the necessity of deciding whether to pursue a commercial, industrial arts, or academic curriculum, they should become familiar with the United States Census groupings of occupations and the general characteristics and requirements of each of these groups. At the same time that this type of occupational study assists the pupil in selecting a curriculum it will contribute richly to his general education. Such study may well seek to narrow the probable range of choice for most pupils to a relatively small number of occupations for detailed study later. On the other hand, before a particular occupation is chosen quite specific information con-

cerning a few occupations that keenly interest the individual should have attention.

Outline for study of an occupation. The various outlines for occupational study that have been prepared must, of necessity, have many things in common. They differ mainly in their complexity and in the order of arrangement of the different items. In general, such an outline should have a small number of main headings and these should be in logical order. With these two criteria in mind the following outline is suggested:

1. *Importance of the occupation.* How does it serve society? How many people does it employ? Is this number increasing or decreasing? Is it widely distributed, or localized? If localized, in what principal centers is it carried on? What, briefly, is its history?

2. *Nature of the work.* What does the worker do? Is the work highly repetitive or quite varied? Does it tend to stimulate growth?

3. *Working conditions.* Is the work indoors or outdoors? Does the worker stand or sit? What are the general sanitary conditions? What kind of fellow workers will one have? What are the working hours? What kind of organization is there among the workers? How important is membership in this organization?

4. *Personal qualities needed.* What physical qualities are necessary—strength, endurance, hearing, eyesight, etc.? What degree of intelligence and of emotional stability? What personality traits—initiative, cooperation, persistence, leadership, etc.—are highly important?

5. *Preparation needed.* What general education and special training are necessary or desirable? How and where may the special training be obtained?

6. *Opportunities for advancement.* How does one enter the occupation? At what age approximately? What are the average periods of service at different levels of the occupation? What supervisory or administrative jobs in the field lie ahead? What are the principal related occupations in which one might seek advancement?

7. *Compensation.* What annual earnings may one expect at first? What are the average earnings of experienced workers? What are exceptional earnings? How are earnings affected as

one advances in age? How is the compensation paid—weekly, monthly, for special service rendered (e.g., doctor, architect), etc.? Are there, also, commissions on sales? Discounts on goods purchased from the employer by the worker? Profit sharing? Bonuses? What annuity or retirement provisions are in effect? Are there other compensations, such as unemployment insurance, sick benefits, long vacations?

8. *Advantages and disadvantages.* This is mainly a summary heading under which the more outstanding features of the occupation as listed under the other headings are brought together. Also, important features that do not fit under other headings may be placed here.

Uses of the outline. This outline should not only serve the needs of individual pupils who are studying with care a few occupations that have interested them most keenly. It may be used to advantage in that more general study of occupations that comes earlier in the pupil's life, of which mention has been made. When a junior high school class is studying the agriculture group of occupations, some one occupation, for example, general farming, may well be selected as typical of the group and this one be studied by the entire class in accordance with the outline. Similarly, when the mining group is under consideration the work of the coal miner might be studied according to the outline as typical; and when the professional group is claiming attention, the work of the doctor, and so on with the other groups.¹ A typical occupation should be selected in each case. Such procedure would not only serve to give the pupils a good picture of the similarities and differences of the large groups of occupations, but it would tend, also, to drill them in the use of an outline which they would use in their later school study of a few occupations that interest them as individuals. This outline should serve many of them well in later life when, because of technological changes in industry or for other reasons, they find it necessary again to choose an occupation.

Worthy of place as a separate subject. It is argued in some school systems that the entire program of the junior high school

¹ A good illustration of this procedure will be found in the high school textbook, *Planning Your Future*, by George E. Myers, Glayds M. Little, and Sarah A. Robinson, New York: McGraw-Hill Book Company, Inc., 1940.

is already too crowded to permit the teaching of occupational information as a special subject, and that whatever study of occupations is carried on will have to find its place in English, the social studies, or some other established subject. Occupational information is stressed most often in the practical arts and next in the social studies—civics, history, geography, economics—according to reports received from the larger cities a few years ago. The evidence from schools that have tried to provide adequate information concerning occupations through any of the long-recognized school subjects is decidedly against this plan. Occasionally it may be done well, but generally it is done very poorly. In one high school with which the writer is familiar, it was done fairly well for a time through English under the leadership of a principal who was thoroughly interested, and later was done so poorly as to be considered a joke by the pupils. The average teacher of English feels responsibility for teaching English, not occupational information. Besides, few teachers of English know or care enough about occupations to teach the subject well. The same is true of other established school subjects.

Moreover, the subject matter of a good course dealing primarily with occupations is sufficiently valuable educational material to merit a place of its own in the program of studies, with well-qualified teachers in charge. Pupils will respect it more and treat it more seriously if it is an independent subject. If such a situation exists in a school system that it is impossible to introduce occupational information as a special subject, it may be wise to incorporate it in some other subject; but such a situation ought not to exist or, at least, ought not to be permitted to continue.

Tendency to require this subject. Even when assigned a place in the school program as a separate subject, occupational information is not sure of a fair chance, as is shown by the following criticism made by the director of vocational guidance in a large city:

The occupations course is an elective and for some reason was placed in the commercial curriculum. For that reason it is taught by commercial teachers. In one high school there are 10 classes, all taught by teachers of bookkeeping. The teachers change from semester to semester. The teachers are untrained and unqualified to teach occu-

pations. When handled by civics teachers it is done better, but there is room for improvement. It is unsatisfactory at present because:

1. It is in the commercial curriculum and only commercial students enroll for it.
2. It is an elective.
3. Teachers at present are not qualified to teach it.

Why occupational information is needed by students in the commercial curriculum more than by others, why even in this curriculum it should be elective rather than required, and why teachers of bookkeeping are particularly qualified to teach it would be hard to explain on logical grounds. If the special course in occupations is to accomplish effectively the purpose for which it is intended, it must be taken by all pupils and must be taught by teachers who are at least as well qualified to teach this particular subject as are teachers of English or physics or French to teach their subjects. In recent years there has been a growing tendency for secondary schools, especially junior high schools, to require their pupils to devote some time to occupational information either as a separate course or as an important unit in some other course. Also the present tendency is strongly in the direction of making provision for more effective teaching of this subject.

Detailed study of a large number of occupations undesirable. The kind of occupational study described above makes easily avoidable the monotonous repetition that has so often destroyed or greatly limited the value of a course in this subject. There is no good reason why a boy with artistic aptitudes and interests should spend approximately one-fourth of his school time for a semester or a year studying the detailed requirements and opportunities of fifty or one hundred of the most common occupations in industry and business. Far better is it for him, and for his fellow pupils also, if, after they together have become familiar with the general features of the large groups of occupations and have acquired a plan for occupational study, he looks up with care a few artistic occupations and reports to class on one or two of them and each of his fellow pupils does the same thing along the line of his particular interests. Each pupil thus acquires information needed in arriving at a decision of his own and at the same time sufficient knowledge of other occupations for purposes of general education. Some textbooks in this field, even on the

junior high school level, make the mistake of providing for all pupils to study a large number of occupations with the result that the subject becomes monotonous and unpopular with pupils and teachers alike.

Occupational information through other courses. Essential as is provision in secondary schools for special study of occupational information and however effectively this may be done, teachers of all other subjects in these schools also have a responsibility in this matter. Every subject teacher should be expected to assist his pupils to obtain significant information concerning the occupations which are closely related to, or depend to a large extent upon, his subject.

For example, the teacher of mathematics should help his pupils to obtain a general picture of the opportunities and requirements of engineering, of actuarial work, of mathematics teaching, and of other occupations in which a considerable knowledge of mathematics is essential. At the same time he should help those pupils who show a high degree of mathematical interest and aptitude to obtain more complete and detailed information concerning these occupations, covering the items included in the outline found on pages 111-112. The mathematics teacher should know more than any other member of the school staff, not excepting the teacher of occupational information himself, about these particular occupations and he should be expected to share this knowledge with interested students and to help them find additional information that they may need.

Teachers of English, physics, chemistry, biology, and other subjects should do the same in their respective fields. In the case of the so-called "tryout" or "vocational exploratory" subjects, which will be discussed in the next chapter, special attention should be given to this matter. A teacher of agriculture, or household arts, or commercial subjects, or shop subjects in junior high school who is content to stress technical subject matter, processes, and projects without helping his pupils to acquire additional information of guidance value concerning the occupations which are based upon his subject is missing a rare opportunity for genuine service. This is true even though the pupils may have been over some of the same ground in the occupations course. The information will come with new force and meaning when obtained in connection with actual experiences

selected from the occupation and under the leadership of the one who is directing these experiences. Of course, the teacher who is in charge of the special occupations course should cooperate with the other subject-matter teachers in making this work effective and in avoiding undesirable duplication.

Methods of teaching an occupational information course.¹

Methods of teaching a subject of this character, to be effective, must bring into play pupil initiative and pupil activity as fully as possible. Each pupil should be required to gather material on points covered by the outline, from books and pamphlets in the library, from newspapers and magazines, from workers in the occupations that are studied, from visits to shops and offices where the occupations are carried on, and from other sources. Class debates upon the relative merits of different occupations, dramatizations, of which excellent examples are found in Lincoln's recent book,² oral reports to the class, and written reports, the best of which may be published in the school paper, should be encouraged. The teacher, to be sure, must see to it that the information brought together in this manner is accurate and reliable.

Occasionally a successful man or woman representing the occupation under consideration may be brought before the class to present his or her views as to the advantages and disadvantages of the occupation and methods of winning success in it. This works best when only pupils interested in the occupation discussed are present. Some schools feature conferences of this sort between representatives of occupations and groups of pupils interested in the same occupations. The speaker, however, usually needs to be given in advance an outline indicating the points in which the class is interested, and the pupils should have a chance to question the speaker concerning points not covered or not understood. Moreover, the speaker should be selected with great care.

The teacher who gives the course in occupations will find the school library and the public library indispensable allies. The alert teacher will see to it that librarians become interested in obtaining occupational information material, in placing this material where it is easily accessible to pupils, in calling their

¹ For a more complete discussion of methods of teaching occupational information the reader is referred to Mildred E. Lincoln's *Teaching about Vocational Life*, Scranton, Pa.: International Textbook Company, 1937.

² *Ibid.*

attention to it by means of bulletin-board announcements, and in other ways. Librarians usually can be depended upon to cooperate most cordially in work of this character.

Visual aids. Visual aids in the form of sound films, silent films, stereoptican slides, stereoscopic views, pictures cut from magazines and newspapers, exhibits showing processes of manufacture, carefully planned trips to industrial plants and other places where the occupation is carried on, are often used effectively. As long ago as 1929 Kefauver and Curtis compiled a long list of motion-picture films of occupational-information type which were then available, mostly free of charge except for transportation.¹ While many of these films, and others of similar kind that have become available more recently, were not prepared according to the best educational principles, nevertheless they have value as aids in teaching this subject. Material of this kind has been improving steadily year by year and becoming more readily available. Some teachers have stimulated their pupils to bring together in the form of career books information concerning particular occupations, including pictures clipped from various sources. Others have encouraged the preparation by pupils of exhibits showing manufacturing processes or of charts and graphs illustrating occupational trends. An alert teacher will find many ways to use visual material to good advantage, at the same time providing for pupil initiative and pupil activity.

Sources of occupational information. In recent years a large amount of printed material has appeared in this field, some of which is listed at the end of this chapter. A number of textbooks for use in junior and senior high schools have been published. Many books suitable for use as references have been prepared which deal with particular groups of occupations, such as those in engineering, advertising, business offices, and printing trades, and the metal trades. Several books are devoted wholly to occupations for women. A dictionary of 3,500 jobs, bearing the title *The Book of Opportunities*,² is available. A very valuable publication of the same type and of more recent date is the

¹ GRAYSON N. KEFAUVER and JOHN W. CURTIS, "Visual Aids in Imparting Occupational Information," *The Vocational Guidance Magazine*, VIII (December, 1929), 111-120.

² RUTHERFORD PLATT, *The Book of Opportunities*, New York: G. P. Putnam's Sons, 1933.

*Dictionary of Occupational Titles*¹ brought out by the U.S. Employment Service (now the U.S. Bureau of Employment Security). A few years ago the American Library Association brought out a bibliography of occupational literature entitled *Books about Jobs*,² in which approximately 8,000 references are included. Many of these references are annotated and all are classified by fields of occupations. *The Occupational Index*,³ a monthly publication, gives a brief account of new material in the field. *Vocational Trends*, *Vocational Guide*, and other publications of Science Research Associates⁴ are valuable means of keeping up with current materials and conditions in the field of occupations. *Vocational Guidance Digest*⁵ presents each month abstracts of material of this nature which appears in current periodicals. The monthly magazine, *Occupations*,⁶ has included carefully prepared descriptions of numerous occupations.

A large amount of material in pamphlet form is available also, each pamphlet dealing with a particular occupation. Some of these pamphlets have been published by government bureaus, others by organizations of national scope, and still others by state and city boards of education. Radio broadcasting companies have, for some years, been presenting weekly broadcasts of information, often in dramatized form, concerning specific occupations. The scripts of many of these broadcasts have been printed and may be obtained from the company which presented the program. *Your Future*,⁷ published weekly during the school year and planned especially to interest high school youth, contains descriptions of occupations along with other guidance material.

Much valuable occupational information material, not available for general distribution, has been prepared by local school

¹ *Dictionary of Occupational Titles*, U.S. Department of Labor, U.S. Employment Service, Washington: Government Printing Office, 1939.

² WILLARD E. PARKER, *Books about Jobs*, Chicago: American Library Association, 1936.

³ *The Occupational Index*, New York: Occupational Index, Inc.

⁴ Science Research Associates, Chicago, Ill.

⁵ *Vocational Guidance Digest*, Stanford University Press, Stanford University, Calif.

⁶ *Occupations: The Vocational Guidance Magazine*, published by the National Vocational Guidance Association, Inc., New York.

⁷ *Your Future*, Columbus, Ohio: American Educational Press.

people for use in their own schools. Material thus prepared, if the job is well done, has the merit of meeting local needs better than does material intended for use throughout the country, since occupational conditions differ to some extent in different localities. A valuable source of information of this type is the U.S. Bureau of Employment Security which has undertaken to prepare descriptions of thousands of jobs in industry and business and has already published several volumes of such descriptions covering certain occupational fields.

Those who use occupational information from any source will need to keep in mind the changing character of this kind of information. Some things that are true this year will not be true next year. The importance of the occupation, the nature of the work done in it, working conditions, preparation needed, opportunities for advancement—all may change considerably within a period of five years. Of course the extent of change differs greatly with different occupations. In selecting printed occupational information material for study or reference it is always well to check it for recency of preparation. In fact, the alert teacher will find it desirable to check for himself and to encourage his students to check such material both for its recency and for its application to the local situation.

Measuring outcomes of a course in occupational information.

It is, to be sure, just as desirable to know what results from teaching this subject as from teaching any other subject in the secondary school curriculum. In attempting to measure results in this case it must be kept in mind that the work has two principal objectives:

1. To contribute to the general education of the pupil by giving him a better understanding and appreciation of occupations and of workers in them.
2. To aid the pupil in choosing a vocation and in planning preparation for it.

Vocational guidance is concerned with the second of these objectives.

Determining whether one method of teaching occupational information is more effective than another in supplying pupils with facts concerning occupations or whether those who have pursued such a course possess a larger number of these facts than those who have not is a quite different matter from deter-

mining whether these facts have influenced the vocational plans of the students in a desirable manner.

In an effort reported by Hand to determine whether pupils who had taken a "life-career" course made better scores on a test of vocational and educational information than did comparable pupils who had not taken such a course, it was found that differences favorable to the life-careers group were so slight as to be insignificant.¹ On the other hand, Lincoln reports a significant difference in improvement in knowledge of occupations in favor of those who studied occupations for twenty weeks as compared with a control group composed of those who did not pursue this study, as measured by scores made on the Brewer-Lincoln tests of vocational and educational information before and after the experiment.² Lincoln reports, also (1) that some improvement was made by the control group, and (2) that "the separate class meeting five times a week is shown, within the limits of the experiment, to be the most effective means of presenting vocational and educational information."³

An experiment conducted by Williamson with college students gave results even more favorable to the formal study of occupations than those reported by Lincoln, as far as factual knowledge in the field is concerned. Even the control groups in Williamson's experiment gained approximately seven points in occupational information as measured by the test given at the beginning and again at the end of the experimental period. Thus substantial improvement in factual knowledge concerning occupations occurred in case of these college students even though no course in the subject was taken. However, improvement by the groups that studied occupational information as measured by the same tests, was two to three times as great as was that of the control groups.⁴

Of course, the entire matter of measuring the effectiveness of occupational information courses in the schools is still in its infancy. Certainly, unless it can be proved that those who have

¹ H. C. HAND, *An Appraisal of the Occupations or Life-career Course*, Palo Alto, Calif.: The author, 1934.

² MILDRED E. LINCOLN, *Teaching about Vocational Life*, p. 471. Scranton, Pa.: International Textbook Company, 1937.

³ *Ibid.*, p. 477.

⁴ E. G. WILLIAMSON, "A College Class in Vocational Information," *School Review*, XLV (February, 1937), 123-130.

pursued such courses possess a greater body of factual data that are significant in choosing a vocation than do those who have not, the subject has no justification for vocational guidance purposes. Certainly, also, it is desirable to determine the relative effectiveness of different methods of teaching the subject. It is desirable that testing along these lines be continued. But until tests are devised which measure the influence of the factual data acquired by members of the class on their vocational choices, much still remains to be done in measuring the effectiveness of occupational information courses.¹

SUMMARY

Supplying youth with information concerning occupations is a first step in vocational guidance. The kind of information needed depends on how far the youth has progressed toward his choice of occupation. Before selecting the curriculum he will pursue in junior high school he needs to know about the general requirements of the large groups of occupations as classified by the United States Census. Before choosing a particular occupation he needs quite specific information concerning a few occupations that interest him most.

A general outline for study of a particular occupation should include: (1) importance of the occupation; (2) nature of the work; (3) working conditions; (4) personal qualities needed; (5) preparation needed; (6) opportunities for advancement; (7) compensation; (8) advantages and disadvantages. This outline may be used both for class study of a typical occupation in each of the large census groups and in study by the individual pupil of each occupation that interests him.

Occupational information is worthy of a place as a separate subject in the secondary school curriculum. Usually when taught only in connection with English, social studies, practical arts, or some other regular subject the teacher slights occupational information. A teacher of this subject requires special preparation.

¹ A summary of attempts to measure results of vocational guidance, 1907-1932, prepared by Harry D. Kitson and E. M. Stover, will be found in the *Personnel Journal*, XI (October, 1932), 150-159. A summary of similar attempts for the period 1932 to 1937, by Harry D. Kitson and Margaret Crane, will be found in *Occupations: The Vocational Guidance Magazine*, XVI (June, 1938), 837-842.

Detailed study of a large number of specific occupations by all members of a class is undesirable. It is better for each member to study a few occupations that interest him and report to the class.

In addition to providing for study of occupations as a special subject, every subject teacher in the secondary school should be expected to assist his pupils to obtain significant information concerning the occupations which are closely related to his subject. He should know more about the opportunities and requirements of these occupations than anyone else connected with the school.

In teaching occupational information pupil initiative and pupil activity can easily be used in many ways with good results. Much responsibility should be placed upon the pupil for gathering information from firsthand sources in accordance with the outline. Outside speakers dealing with their own occupations may be used to a limited extent. Much good visual material concerning occupations is available. A large amount of printed material in book and pamphlet form can be obtained for reference use. New material of this type is appearing constantly. It is important that material used be recent since conditions in this field change rapidly. The class itself can be used to good advantage in gathering up-to-date information concerning local occupations.

While it is highly desirable that the effectiveness of teaching along this line should be measured, relatively limited means for this purpose have yet been devised.

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CHAPTER IX

THE SELF-INVENTORY SERVICE

Nature of self-inventory service. As its name implies, the purpose of this service is to aid the individual in taking stock of his personal assets and liabilities. It seeks to acquaint him with and to help him evaluate his abilities, aptitudes, interests, limitations, personality traits, and achievements that should be taken into account in making plans for the future. It is obvious that such stock-taking is necessary in relation to educational, vocational, recreational, and community-service activities alike, if the individual is to make desirable progress in these respects in accordance with some well considered plan, rather than merely to drift. However, it is with the vocational implications of this stock-taking that the present discussion is primarily concerned.

While this service may properly be described as that of aiding an individual to take stock of his personal assets and liabilities, it must not be thought of as a service that is performed once for all during that individual's school career nor even at fixed intervals only. It is rather a continuous process which involves self-discovery, also. It helps the individual, by means of school and other experiences, to find his hidden assets and liabilities as well as to list and evaluate those of which he is already conscious.

What a self-inventory service includes. A vocational guidance program that undertakes to provide an adequate service of this type will give much attention to what are generally called exploratory or tryout experiences, especially to such as have significance in relation to vocational choice. One who samples the fundamental experiences of an occupation knows more about his aptitudes and limitations with reference to that occupation, and sometimes with reference to an entire group of related occupations, than he could possibly learn in any other way.¹ Such

¹ Eaton stresses this point when he says: "The most real and vital means to knowledge of vocation-mode in relation to one-self is participation in it. But it is a means distinctly limited. Observation permits of use of a wider

experiences help, also, to reveal to the individual some aspects of his personality that should be taken into account in choosing an occupation. And these results accrue whether or not the individual is aware that this is an important part of the purpose of the experiences.

A second agency of the self-inventory is self-analysis or self-rating with reference to a limited number of the individual's most important personality assets and liabilities. The individual judges subjectively the degree to which he possesses each of the qualities on the self-analysis list, which will be discussed later. To be sure, the exploratory experiences through which he has passed furnish data for this self-rating process. In fact, filling out a self-analysis form may be considered as merely analyzing and bringing together important results of one's exploratory experiences of various sorts. For example, it is on the basis of these experiences that he must decide how to rate himself on cooperation, if the rating is to be of real significance.

Then, too, the counseling service, to which a later chapter is devoted, makes an important contribution to the individual's self-inventory. In helping the individual to consider himself in relation to the courses of action that lie open to him, it is first of all necessary for him to understand himself. A more complete discussion of counseling in relation to the self-inventory service will be found in Chap. XIII.

It should be noted that both exploratory experiences and self-ratings furnish data that will be used in other ways in the guidance program. For example, reports filed by teachers of courses that are highly exploratory in character provide important data of the type described in Chaps. XI and XII for use in counseling and in placement. But in this chapter attention will be centered on the parts exploration and self-rating play in acquainting the

range of resources, but is second to participation in vividness. Instructional information allows use of abundant resources, but is far behind the other means in convincing reality of experience. Moreover, it is largely futile except as it is founded upon firsthand experience through participation and observation of activities typical of those with which it purports to deal. No test has yet been devised which will take the place of active adventuring in the economic medium. But tests have a place in discovery of aptitudes and resources in the individual." THEODORE H. EATON, *Education and Vocations*, p. 140, New York: John Wiley & Sons, Inc., 1926.

individual directly with his assets and liabilities that are significant for his vocational success.

VOCATIONAL EXPLORATION

Exploratory function of the junior high school. Authorities on the junior high school or intermediate school, as it is sometimes called, embracing the seventh, eighth, and ninth grades, agree that one of the most important functions of this school is to provide tryout or exploratory experiences for its pupils. This, they say, is the period par excellence for exploration of a great variety of individual tastes, interests, and capacities—artistic, literary, scientific, linguistic, and vocational.

Koos, in discussing the junior high school twenty years ago, pointed out that the function of exploration for guidance is a corollary to the function of recognition of individual differences. He maintained that, since differences among pupils are of sufficient importance to be recognized, provision should be made for the discovery of these differences.¹

Also some two decades ago, Briggs placed third in his list of five things the junior high school should attempt to do: "To explore, by means of material in itself worth while, the interests, aptitudes, and capacities of pupils."²

Somewhat more recently Davis stated the case even more emphatically:

Of all the functions of the junior high school, that which seeks to aid pupils in discovering their own capacities and limitations, interests and distastes, powers and weaknesses, is, in the judgment of the writer, the most important. It is this function above all others that justifies the reorganization of schools on a new basis.³

Inglis⁴ and other authorities on the junior high school followed with similar emphasis on the exploratory function of this unit of the school system. A good statement of more recent date

¹ LEONARD V. KOOS, *The Junior High School*, p. 48, New York: Harcourt, Brace, & Company, Inc., 1920.

² T. H. BRIGGS, *The Junior High School*, pp. 165–67, Boston: Houghton Mifflin Company, 1920.

³ C. O. DAVIS, *Junior High School Education*, p. 99, Yonkers-on-Hudson, N. Y.: World Book Company, 1924.

⁴ ALEXANDER J. INGLIS, "Vocational Guidance in Secondary Education," *The Vocational Guidance Magazine*, IV (October, 1925), 4.

concerning the exploratory function of the junior high school is that presented in a publication of the Pasadena school system:

In the junior high school it is necessary and important to continue this common integrating education but *this is no longer the dominant note*. The dominant note of junior high school education is expressed by the word "exploration." By this we mean that the student is exploring with two purposes in view, (1) to become acquainted with as many fields of human interest and activity as possible in order that he may better understand the world in which he lives and have a background for choosing a field in which to work later on; (2) to become better acquainted with himself through a variety of school experiences in which he may discover his best aptitudes and interests. It is because the junior high school is chiefly concerned with this exploratory process that the guidance program must be most carefully planned and emphasized.¹

Still more recently, the Committee on the Orientation of Secondary Education, appointed by the Department of Secondary School Principals of the National Education Association, presented as fourth of nine functions of secondary education: "To explore higher and increasingly specialized interests, aptitudes and capacities of students, looking toward the direction of them into avenues of study and of work for which they have manifested peculiar fitness."²

Exploration in senior high school and college. The exploratory function of the formal educational program persists in the senior high school and even in the college, though it does not characterize these institutions so fully as it does the junior high school. To be sure, the general education objective which dominates the work of the elementary school continues strong in junior high school, senior high school, and college. Also, the vocational preparatory objective comes into the picture in the senior high school period and continues on through college and the professional school. But along with the general education and the vocational preparatory objectives of senior high school and college goes, also, the exploratory objective. The so-called "orientation course" required of freshmen students by some

¹ *A Bulletin of Information on the Junior High Schools for Parents, Teachers, and Pupils*, p. 9, Pasadena, Calif.: Board of Education, November, 1932.

² Department of Secondary School Principals, National Education Association, *Bulletin* 64, (January, 1937), 95-116.

colleges is definite recognition of this objective on the college level. In reality, all senior high school and college work, for whatever purpose it is offered, serves an exploratory purpose also. For example, high school mathematics has tested, in certain respects, many a boy's fitness for engineering, and college courses in science have helped many a freshman and sophomore discover whether he should go into a scientific career.

Means of providing high school youth with vocational exploratory experiences. In the discussion that follows, attention will be given only to those tryout or exploratory experiences which seem to have significance in relation to vocational choices. Exploratory experiences for the sake of or significant for educational, recreational, or community-service guidance concern us here only as they aid the individual in making an inventory of his own vocational aptitudes and interests and his personality traits.

Various bases of classification of the means used for exploratory purposes in junior and senior high school are available. For the purposes of this chapter, they will be grouped under three headings: (1) exploratory experiences provided in the school through the subjects included in the program of studies; (2) exploratory experiences provided in the school by means of the activities program, sometimes called extracurricular activities; and (3) exploratory experiences provided outside the school in part-time, afterschool, or summer employment.

Exploration by means of school subjects. Most junior high schools and many senior high schools make extensive provision for what are called "vocational tryout" or "exploratory" courses. The offerings which are stressed for this purpose, often designated practical arts, include agriculture, commercial subjects, household arts, and industrial arts, the last named including mechanical drawing. In some schools the vocational exploratory function is stressed also in music and freehand drawing. Especially is this true in case of freehand drawing when commercial art is included in the program.

It is understood, of course, that all these subjects are expected to serve other purposes also. It is generally agreed that the content of the course should always be "in itself worth while,"¹ as Briggs puts it, though this must not be considered as mini-

¹ BRIGGS, *op. cit.*

mizing the worth-whileness of the exploratory purpose. Another way of expressing it would be that any so-called "vocational exploratory" course should be rich in both general education and exploratory values. Otherwise it cannot be justified in the program of the school.

The extent to which the different practical arts subjects are offered in junior high schools of the Middle West is shown by the following table representing all junior high schools in the territory of the North Central Association of Colleges and Secondary Schools at the time the investigation was made. While this material is now some years old, it is believed that the situation has not changed to any great extent.

PERCENTAGE OF JUNIOR HIGH SCHOOLS IN NORTH CENTRAL TERRITORY
OFFERING CERTAIN SUBJECTS AS ELECTIVES

Subject	Percentage
Latin.....	27.6
Modern foreign language.....	27.3
Algebra.....	24.2
General science.....	30.4
Industrial arts.....	88.7
Domestic science and arts..	88.4
Drawing.....	75.4
Music.....	71.7
Agriculture.....	25.9
Ancient history.....	3.8
General history of modern Europe...	6.5
Commercial work.....	16.7
Distinctive vocational work..	5.1
Printing.....	8.2

It is seen from this table that in North Central territory at least, industrial arts and household arts are offered as electives in nearly all the junior high schools and that the percentage of such schools offering these subjects is greater than the percentage offering any other elective subject. In this connection it should be noted that many schools require a certain amount of work in these two subjects, usually in the first and second semesters, and offer them as electives in other semesters of the junior high school program. The total percentage of North Central junior high schools in which exploratory courses in these fields are actually provided is, therefore, even larger than would appear from the above table. As would be expected, agriculture is not offered

as an elective by a large proportion of the junior high schools, nor is commercial work. The former is usually omitted from the school program in larger and medium-sized cities, while both subjects find a much larger place in senior than in junior high schools.

The place given to practical arts in the junior high schools of one of the large eastern states is suggested by the following table which presents minimum standards published in 1937 by the State Department of Public Instruction of Pennsylvania for programs of accredited junior high schools. A period of 1 hour in length is recommended.

STANDARD PROGRAM OF STUDIES OF ACCREDITED JUNIOR HIGH SCHOOLS IN PENNSYLVANIA

Seventh year		Eighth year		Ninth year	
Subject	Periods per week	Subject	Periods per week	Subject	Periods per week
English.....	5	English.....	5	English.....	4
Mathematics.....	5	Mathematics.....	4	Mathematics.....	4
Social studies.....	4	Social studies.....	4	Social science.....	4
Geography and science.....	5	Geography and science.....	3	General science.....	4
Health.....	3	Health.....	3	Health.....	2
Practical arts.....	2	Practical arts.....	2	Practical arts.....	2
Home ec. (girls)		Home ec. (girls)		Home ec. (girls)	
Shop (boys)		Shop (boys)		Shop (boys)	
Fine arts.....	2	Fine arts.....	2	Fine arts.....	2
Art (1)		Art (1)		Art (1)	
Music (1)		Music (1)		Music (1)	
Activities.....	3	Activities.....	3	Activities.....	3
Auditorium		Auditorium		Auditorium	
Homeroom		Homeroom		Homeroom	
Clubs		Clubs		Clubs	
Guidance.....	1	Guidance.....	1	Guidance.....	1
				Elective subjects (select one)	
				Jr. business training.....	4
				Latin.....	4

It will be observed that this program provides for two hours of required work per week in home economics for girls and the same amount in shop for boys throughout the junior high school period. Provision is made, also, for four hours of junior business

PASADENA JUNIOR HIGH SCHOOLS

GRADE SEVEN

*Basic Pattern**

Health and physical education
 English
 Social science
 Arithmetic
 Home economics (for girls)
 Clothing, 7-1
 Foods, 7-2
 Industrial arts (for boys)
 Woodshop, 7-1
 Mechanical drawing and printing,
 7-2
 Music and art

Electives

Choice in the required music†
 Band
 General music
 Orchestra
 Piano, 7-1

GRADE EIGHT

*Basic Pattern**

Health and physical education
 English
 Social science
 General science
 Electives (two)

Electives‡

Art
 Commercial subjects
 Penmanship and spelling (1
 semester)
 Foreign languages
 Broadening and finding course in
 French, German, Latin, and
 Spanish, 1 semester, 8-2 only
 Home economics
 Homemaking (foods) (1 semester)
 Homemaking (clothing) (1
 semester)
 Industrial arts
 Electricity and sheet metal (first
 semester)
 Elementary mechanics (second
 semester)
 Library craft (1 semester)§
 Mathematics
 Arithmetic (if only 1 semester is
 elected, it should be the first,
 8-1)
 Music†
 Band
 Junior glee club
 Orchestra

GRADE NINE

Basic Pattern

Health and physical education
 English
 Social science
 Electives (two)

GRADE TEN

Basic Pattern

Health and physical education
 English
 Biology
 Electives (two)

* Unless otherwise indicated each subject listed continues through two semesters.

† In order to meet the needs of individuals most effectively in relation to music offerings, certain exceptions to general regulations are sometimes desirable.

‡ Credit may be secured for one semester of any two-semester elective.

§ A ninth- or tenth-grade elective at one junior high school.

Ninth- and Tenth-grade Electives

Subject	Credits allowed	Subject	Credits allowed
Art:		Industrial arts:	
Artcraft.....	1	Architectural drawing..	1
Commercial.....	1½	Automobile mechanics..	1
Design and decoration..	1½	Electricity.....	1½
Illustration.....	1½	Machine drawing.....	1
Stagecraft.....	1½	Machine shop.....	1
Commercial subjects:		Mechanical drawing....	1
Business training.....	1	Printing.....	2
Typing.....	1	General metalworking..	1
Personal accounts.....	1	Woodshop	2
English:		Mathematics:	
Dramatics.....	1½	Algebra.....	1
Newsriting.....	1½	Plane geometry.....	1
Public speaking.....	1½	Music:	
Foreign language:		Band.....	2
French.....	2	Glee club.....	2
German.....	2	Orchestra.....	2
Latin.....	2	Social science:	
Spanish.....	2	World history.....	1
Home economics:			
Homemaking:			
Foods.....	1½		
Clothing.....	1½		
Foods, advanced... ..	1½		
Clothing, advanced..	1½		
Homecraft.....	1½		

training as an elective during the ninth grade. It should be understood that these are minimum requirements for accredited junior high schools. Publications of the State Department of Public Instruction stress the exploratory purpose of these subjects, along with other objectives.

More varied exploratory opportunities are provided in the Pasadena, Calif., four-year junior high schools (seventh, eighth, ninth, and tenth grades) as will be seen by examining the foregoing recent program of studies from that city.

Practical arts in senior high school. Practical arts subjects are not offered in as large a percentage of three- and four-year senior high schools as of junior high schools. The reason for this seems to be that many of the four-year schools especially are found in

small communities that do not maintain junior high schools and that have not felt able to offer practical arts in any of the school years. However, commercial, industrial arts, and home-economics subjects are offered in practically all of the larger high schools and in those of medium size, and agriculture in a good percentage of the smaller ones. And these subjects are taken by large numbers of pupils as is shown by the following table in which 2,558 high schools with an enrollment of 1,330,142 pupils are represented.

PERCENTAGE OF ENROLLMENT IN EACH SUBJECT-MATTER FIELD FOR NORTH CENTRAL ASSOCIATION, 1934-35

Subject	Percentage of total enrollments		
	1925	1930	1935
Mathematics.....	55.2	54.9	47.5
English.....	86.3	97.6	97.3
Latin.....	24.8	21.9	17.0
French.....	9.4	9.4	8.0
Spanish.....	9.1	7.9	6.0
German.....	1.0	2.5	3.5
Total foreign languages.....	44.1	42.8	35.1
Social studies.....	62.1	69.3	74.8
Sciences.....	43.5	49.0	51.8
Commercial subjects.....	45.5	56.0	66.8
Industrial arts.....	13.8	16.6	24.1
Household arts.....	14.7	13.4	14.7
Agriculture.....	3.2	3.2	3.0
Music.....		38.3	38.1
Art.....		7.0	7.4

In reading this table it should be kept in mind that industrial arts courses are taken almost exclusively by boys and household arts courses by girls. Also, that the percentages given are for all years of the high school combined, thus assuring a higher percentage proportionately for subjects that are pursued three or four years than for those pursued a shorter period of time, and for required subjects than for elective subjects. The table really means that during the year 1934-1935 one-half of the boys in these 2,558 high schools were in industrial arts classes, nearly one-third of the girls were in household arts classes, and two-

thirds of the girls and boys (mostly girls) were in the commercial classes. The percentages taking these subjects during their three or four years in high school were doubtless considerably larger, since many pursue subjects of this type only one or two years.

It should be noted, also, that the subjects showing the largest percentage of increase in enrollments in both the five- and the ten-year periods ending in 1935 were the commercial and the industrial arts subjects.

The significance of these facts for vocational exploration deserves emphasis. True, the vocational preparatory objective is stressed in much of this work on the senior high school level, especially in case of commercial subjects. But even when taken for vocational preparatory purposes these subjects have important exploratory values in that many pupils discover an aptitude or lack of aptitude for specific occupations in the industrial or business field and their vocational plans become more specific as a result. Even though, as is too often the case, neither teacher nor pupil is conscious of the exploratory objective, the experiences through which the pupil passes in his work do serve an exploratory purpose.

Exploration for agricultural occupations. The junior high school work actually given in agriculture differs greatly in exploratory values. In one city with a population of 50,000, it consists of textbook and indoor laboratory work, dealing only with plant life. In another city of nearly 2 million population, Los Angeles, both plant and animal life are covered and splendidly equipped gardens are provided as laboratories. Gardening, plant propagation and lath-house work, landscaping, fruit production, forestry and conservation, care of livestock and pets, including dairy work and poultry raising, are all offered in the seventh, eighth, and ninth grades, work in the eighth and ninth grades being elective. Things a boy should be able to do and should know in the plant propagation and lath-house work are thus described in one of the publications of the Los Angeles school system:

PLANT PROPAGATION AND LATH-HOUSE WORK

Things a Boy Should Be Able to Do:

1. Mix nursery soils.
2. Plant seeds in flats.
3. Transplant plants into flats and pots.

4. Use cold frames.
5. Make the following cuttings: simple, heel, mallet, single eye, leaf.
6. Set and care for cuttings.
7. Water plant materials properly.
8. Apply fertilizers correctly.
9. Prevent plant diseases.
10. Plant bulbs, tubers, and rhizomes.
11. Make root divisions of plants.
12. Propagate plants from runners and layerings.
13. Prune and shape plants properly.

Things a Boy Should Know:

1. Types of soil: sand, silt, clay, loam.
2. Uses of soils and their mixtures.
3. Scientific technique of planting seed and setting cuttings.
4. How to handle and care for young plants.
5. Uses of hard wood, soft wood and succulent cuttings.
6. The water requirements of plants.
7. Uses of plant foods.
8. Plant diseases and insect pests and their means of control.
9. Scientific methods of improving plants through crossbreeding and selection.
10. The technique and advantages of budding and grafting.
11. Methods and practices in pruning shrubs, ornamental trees, fruit trees, and berries.

The two cities to which reference has just been made are, however, exceptions to the general rule in making any provision at all for instruction in agriculture in their junior high schools. In the great majority of city school systems this subject is considered as suitable for rural areas and small towns, and these maintain junior high schools only in exceptional cases. It will be noted, for example, that the Standard Program of Studies of Accredited Junior High Schools in Pennsylvania (see page 131) does not include any provision for instruction in agriculture, though commercial, home economics, and shopwork are included. But, while not maintaining the junior high school organization, many rural and small-town schools teach agriculture in the junior high school grades, though usually with little concern about its vocational exploratory values. The assumption seems to be that the pupils obtain adequate exploratory experiences in the farm homes from which most of them come.

In many four-year high schools and in some three-year senior high schools in smaller cities and towns, agriculture is offered on a vocational preparatory basis, with federal and state aid under

the provisions of the Smith-Hughes and George-Deen Acts. There were, for example, 343 such high schools in Illinois in the year 1938-1939, 350 in Ohio, 45 in Maine, 174 in California, 411 in North Carolina, and 192 in Oklahoma. Every state has some high schools offering these federally aided courses in agriculture, the total number of such schools being more than 8,000 in 1939, with approximately 300,000 students enrolled in agriculture. For the most part these schools are in comparatively small towns. While it is assumed that pupils entering these courses have already decided in favor of an agricultural occupation, many change their minds and go into other lines of work as a result of their experiences in the agriculture courses, and a still larger number find these courses a means of helping them to decide which branch of agriculture they wish to follow. The material dealing with farm crops, vegetable gardening, horticulture, animal husbandry, farm management, and poultry raising, including project work each year, is rich in exploratory values. In fact, senior high school agriculture is serving this purpose to a much greater extent than is junior high school agriculture.

In view of the facts presented above it is clear that the number of youth who are really obtaining agricultural exploratory experiences in American schools, even including those in vocational preparatory classes, is extremely small in comparison with the 10,471,988 people who, according to the 1930 census, are engaged in this field of work. It will be recalled from the table on page 134, that only 3 per cent of the pupils enrolled in 1935 in the three- and four-year senior high schools of that great agricultural area embraced in the North Central Association of Colleges and Secondary Schools were enrolled in agricultural classes, and most of these were doubtless taking the subject for vocational preparatory purposes. The only conclusion one can draw from the present situation in this respect is that, with all the emphasis which has been placed in recent years on the vocational exploratory function of education, the great group of agricultural occupations has been neglected. Yet there is no logic in the assumption, which seems to be general, to the effect that city school systems should ignore agriculture. It is just as true that many city youth would find occupations for which they are peculiarly fitted in the agricultural group as it is that many rural youth will find suitable occupations in the city.

Exploration for business occupations. The place that commercial subjects should occupy in the junior high school has proved very perplexing to educational administrators. In some cities no commercial work is offered in this school; in others, only business practice in the eighth grade, and typing and bookkeeping in the ninth. In still others typing is offered five hours per week in the seventh and eighth grades, with stenography, commercial English, commercial arithmetic, and bookkeeping in the ninth grade. In the Pennsylvania Standard Program for Accredited Junior High Schools already mentioned,¹ junior business training in the ninth grade is the only commercial subject included.

The fact of the matter seems to be that in the early days of the junior high school movement commercial subjects were taken over bodily from the traditional four-year high school program without first determining whether they were suited either to the maturity of the pupils or to the purposes of the junior high school. The idea of exploration in the business field appealed to school administrators quite as strongly as exploration in the industrial field, and properly so. But it was a mistake, of course, to assume that the commercial subjects as developed to serve the needs of four-year high school pupils would serve equally well the needs of junior high school pupils.

Various efforts have been made to improve this situation. As long ago as 1919 the subcommittee on Business Education of the Commission on the Reorganization of Secondary Education reported:

The question has insisently been asked, "When may commercial education begin?" With the introduction of the junior high school, there has been the temptation to transfer to this school highly specialized instruction in shorthand, typewriting, and bookkeeping. In other words, the custom has been to give a fairly complete technical training by the completion of the ninth or tenth year. The committee regards this tendency as regrettable.

The committee believes that tryout commercial instruction of a general character may well be given in the seventh and eighth school years. Such a procedure has the double advantage of giving all the pupils some knowledge of commercial affairs, which knowledge will be of value to them no matter what line of work they may later enter

¹ See p. 131.

upon; and, secondly, it gives the basis for an intelligent choice of school subjects. Any plan which requires pupils at the beginning of the seventh or the eighth school year to make a choice of future occupation, that cannot later be easily changed, must work great harm. At this time they have not had the experience, nor have they the knowledge, to choose wisely.

It is further our opinion that the commercial education of the ninth school year may well be of a somewhat general character, such as giving training in the use of the typewriter, the teaching of the fundamentals of accounts, and such practical applications of general subjects as will serve at once as a foundation for later commercial instruction and be of practical use to those who must leave school at the end of the ninth year.

The committee suggested for the eighth year "First Lessons in Business" including business habits, record work, business forms, systems of filing, taking and executing orders, wrapping and shipping goods, messenger service, work of stock clerks, making change and preparing money for deposit, simple accounts and journal entries, and drill in penmanship. For the ninth year the committee recommended elementary bookkeeping and typewriting.

More recently leaders in commercial education have stressed for the junior high school years typewriting as a tool subject for use mainly in the nonvocational activities of life and a general course, called "junior business training," which is usually offered in the ninth grade, without wage-earning implications. The vocational exploratory values of both of these subjects are emphasized, also, by most authorities. However, Pringle,¹ in his recent book on the junior high school, ignores the commercial subjects entirely though he discusses home economics and industrial arts and mentions the exploratory values of these subjects. The Pennsylvania State Department of Public Instruction does not mention typewriting for junior high school but recommends that junior business training be offered one to three semesters in the eighth and ninth grades, preferably in the ninth, and adds: "Every pupil in the junior high school may well take this course." The purpose of the course is stated as follows:

To furnish a tryout or exploratory business course that will aid all pupils in discovering whether or not their interests and abilities are

¹ RALPH W. PRINGLE, *The Junior High School: A Psychological Approach*, New York: McGraw-Hill Book Company, Inc., 1937.

in the commercial field, aid commercial pupils in choosing a special business activity, and aid those leaving school to choose the kind of work to enter.¹

In the senior high school period commercial subjects, like agricultural subjects, are offered largely as vocational preparatory, though many teachers of this work are still thinking of it primarily in terms of general education. Bookkeeping, typewriting, shorthand, commercial arithmetic, commercial law, commercial geography, business English, filing, comptometer and adding-machine operating, and retail selling are the subjects most often included, with most of the time given to typewriting, shorthand, and bookkeeping. More than two-thirds of all enrollments in commercial subjects in North Central Association high schools for 1934-1935 were in these three subjects.

It has already been noted that the percentage of senior high school pupils who take commercial subjects is very large—66.8 per cent in North Central schools in 1934-1935. No other group of elective subjects had so many students enrolled. In fact, only the English and social studies groups, much of which work is required, showed a larger number of enrollments.

Even though most of the commercial work of the senior high school period has either a general education purpose in the sense of preparing for personal business needs, or a definite vocational preparatory purpose, based on the assumption that those who are taking it have already decided to enter the business field, nevertheless it has important exploratory values for many pupils, especially for those who have not already taken similar work for tryout purposes in the junior high school. Some are turned away from business careers by the sample obtained; many others are helped to decide between general office work, clerical work, accounting, retail selling, and the like; and still others catch a vision of the larger possibilities in business for which college preparation in business administration is desirable.

On the whole, however, it must be admitted that the contribution of both junior and senior high school commercial subjects to vocational exploration in the field of business is still extremely meager compared with its possibilities. There is too little

¹ Pennsylvania Department of Public Instruction: *The Administration of Commercial Education in Secondary Schools*, Bulletin 102, 1937.

appreciation of these possibilities on the part of those responsible for commercial education and too little planning for the realization of its exploratory values. High school principals and commercial teachers should recognize more fully the vocational exploratory significance of this work which claims the interest of so large a proportion of secondary school students. A few commercial teachers are beginning to insist, and quite logically, that admission to courses that are designed to prepare for business occupations should be limited to those who have shown ability in earlier commercial courses in which the exploratory aim is stressed. Senior high school work in commercial subjects which follows that stressing exploration would then be for two distinct groups of pupils, one preparing for business occupations and the other preparing better to care for their personal business affairs regardless of their future occupations. Of course, exploratory courses in this field should always be supplemented by information concerning the opportunities and requirements of business occupations, as was discussed in the previous chapter.

Exploration through household arts courses. In household arts subjects as they are taught in most junior and senior high schools little attention is paid to their value for vocational exploratory purposes. In examining the stated objectives of household arts in a number of well-known school systems the author found no mention of vocational exploration. Most educators agree that these subjects deserve an important place in the program of secondary education, but the purposes usually stressed are to round out the general education of girls and to prepare them for the responsibilities of their present and future homes. For example, the major objectives of the Ithaca, N. Y., junior high school courses in household arts have been stated as follows:

1. To develop an appreciation of fundamental health facts as related to life practices.
2. To teach such necessary skills in meal planning, food preparation, and table service as will enable the pupil to apply successfully this knowledge in everyday living.
3. To arouse, within the pupil, a sincere effort to control her own food habits wisely.
4. To aid the pupil to establish an effective regard for the varying needs of the different members of her family.
5. To lead the pupil to plan understandingly her own daily program.

6. To help establish health standards related to the girl's clothing, which can be maintained successfully.
7. To assist the girl in setting up useful standards for the selection of clothing suitable for one of her age.
8. To arouse the girl's interest in developing skill in the construction and repair of simple garments.
9. To develop an appreciation of some of the factors for obtaining beauty in the home.
10. To develop skill in performing efficiently those home activities which are commensurate with the ability of a junior high school girl.

An examination of these major objectives and of courses actually offered in many secondary schools will show that while no particular attention has been given to the exploratory objective in formulating household arts courses, nevertheless these have considerable exploratory value. In the junior and senior high schools combined, girls have an opportunity to obtain experiences that should help them to a greater or less extent in deciding whether they wish to become wage earners as waitresses, cooks, café or cafeteria managers, seamstresses, milliners, designers in the fields of dress or home decoration, dietitians, or nurses. However, the experiences provided in some of these occupations are very limited. Moreover, little or no effort is usually made to supplement these meager experiences with information concerning the occupations represented which would be helpful in making a choice. It is noteworthy, also, that the range of occupations is narrow though it does contain some in which large numbers of women are employed. It must be admitted, therefore, that the household arts courses, as usually taught, do not function in a large way as vocational exploratory experiences.

Exploration for industrial occupations. Industrial arts is the first subject which comes to mind when vocational exploratory courses in the junior high school are mentioned. It was probably in connection with this subject that the terms "exploratory" and "tryout" as applied to school courses were first used. Certainly they have been used most often in this connection, and more attention has been given to organizing the material of industrial arts for exploratory purposes than has been given to organizing any other subject for these purposes.

It must not, however, be assumed that no other purpose is served by industrial arts in the junior high school. Properly

organized and presented, this subject, in addition to providing exploratory experiences, makes important contributions to general education. Indeed many who are engaged in educational work rate these other values as of higher importance.

It has been seen that nearly all junior high schools either require some work in industrial arts or offer courses in this field as electives. The Detroit, Mich., program, for example, includes a course in "household mechanics," required of all boys in the seventh grade, which consists mainly of projects in repair and upkeep of woodwork, plumbing, and electrical appliances of the home. After the seventh grade is completed, boys may elect the technical curriculum. In the eighth grade this includes work in four shop subjects, each for a period of ten weeks. Machine shop, pattern shop, electrical work, auto-mechanics, and printing are offered. The exploratory purpose of these courses is further emphasized in the ninth grade. The tendency in schools of medium size is to stress general shopwork of some kind in the earlier part of the junior high school and provide for more intensive work in special shops later if the school is large enough to justify this. There are still, however, many junior high schools that offer only woodwork and mechanical drawing, the former being of the old "manual training" type. The general shop course usually includes experiences in wood, metal, sheet metal, plumbing, mechanical drawing, and electrical work, especially in relation to upkeep of the modern home.

It is clear that the "manual training" type of course, even under the best conditions as to teaching and equipment, is extremely meager in exploratory values. It gives the boys samples of two or three woodworking trades only. The general shop type of course is immensely more valuable for exploratory purposes because it covers a much wider range of occupations and also because the occupations covered provide employment for large numbers of workers. Indeed the ordinary "manual training" course in woodwork affords pitifully poor exploratory experiences for one part only of the building trades, to say nothing of the metal, printing, textile, and other trades.

Exploration in the senior high school for industrial occupations. In the senior high school the problem of exploratory courses for industry has proved more complicated and difficult. A considerable percentage of boys and girls of low intelligence have left

school. Those who have gone will become, in the main, unskilled and low-grade skilled workers in industry and business workers in minor positions. From those who remain will be filled the great majority of the more important business positions, the highly skilled, technical, and executive positions in the industrial field, and professional positions.

Another feature of the problem is the fact that many of those who take industrial subjects in the senior high school are supposed to do so with a vocational preparatory purpose, on the assumption that a definite choice of occupation, or at least a choice within a comparatively narrow field such as engineering, was made in the junior high school. To be sure, vocational preparatory courses, as was pointed out in discussing agricultural and commercial subjects, often have high exploratory values. Many a boy's choice has been confirmed and many another's changed by his experiences in senior high school electricity, or machine-shop work, or automechanics work. It is a serious question, however, whether there may not well be offered more widely in senior high school an industrial course of general character in which the exploratory purpose is prominent. If offered, such a course properly would start in the tenth grade, though it might be extended into the eleventh grade. Naturally it would be quite different from the general shop course of the junior high school and would stress technical and minor executive aspects of industry as well as trade-process aspects. The presumption would be that many of the boys had had the junior high school course, though it might be open also to those who had not.

There can be no question that much of the shopwork now given in the senior high school years functions very poorly either for vocational preparation or vocational tryout purposes. Nor does it make much of a contribution to the general education of the student. Possibly a tenth-grade course for tryout purposes, with emphasis upon the highly skilled, technical, and minor executive aspects of industry, followed by definitely vocational work for "families" of trades in the later grades, would be the best solution of the difficulties which now surround senior high school shop courses.

Limited number of occupations for which exploratory courses are provided. From this examination of the offerings of junior and senior high schools in agriculture, business, household arts,

and industrial arts, it appears that the number of occupations for which exploratory experiences are provided is very small in comparison with the total number in which men and women are employed. Payne called attention to this in striking manner some years ago, stating that there are 17,000 occupations in New York City, while the junior high schools of that city are providing exploratory courses in only eight of these.¹

But the situation even then was not nearly so hopeless as Payne seemed to think. In the first place, courses of this type provide exploratory experiences for broad fields of employment. Where the proper courses are offered, it is possible for a boy to determine by exploration whether his interests and aptitudes lie in the field of agriculture, business, or industry; and if in industry, whether in the metal trades, building, electrical, or printing trades. In addition, it is often possible for him to obtain some experience in more than one trade belonging to the field of his particular interest.

In the second place, the specific occupations represented in the exploratory courses are, or should be, those in which large numbers of people are employed. Undoubtedly it is true, as Payne maintained, that important occupations are not represented in the exploratory courses provided by the schools of New York City. On the other hand, it is true, also, that the great majority of his 17,000 occupations are relatively unimportant as far as number of workers is concerned. It is quite possible that as many people are employed in 100 of these occupations as in the other 16,900. So, while it must be granted that the range of exploratory courses is still very inadequate, particularly in business and household arts fields, it must be granted, also, that valuable work is done through the courses already provided.

Possibility of exploratory courses for the professions. In what has been said thus far, exploratory courses for the professions have not been mentioned. Obviously providing in high school exploratory experiences in medicine or dentistry, for example, is quite a different matter from providing exploratory experiences in the trades. The large body of technical knowledge upon which the practice of any profession depends is perhaps the most serious obstacle, aside from the fact that human material

¹ A. F. PAYNE, "The Problem of the Tryout Courses," *Industrial Arts Magazine*, XIV (May, 1925), 168-170.

is not so readily available as wood and metal for exploratory purposes. Yet it is quite conceivable that a sufficient number of the more elementary experiences of any profession might be brought together to form a fairly good exploratory course for senior high school students.

In law, a moot court might be used to advantage, with a variety of legal experiences organized around it. In medicine and nursing, the health inspection work and in dentistry the dental clinic work of the school system might serve as centers around which observation and simple exploratory experiences would be organized. Other professions would lend themselves to this plan quite as readily as those mentioned. To be sure, work of this character would need to be supplemented with occupational information material concerning the opportunities and requirements of each profession as the class participates in its observation and simple experiences. For example, study of the requirements of the legal profession and trips to real courts and to real lawyers' offices should accompany the school work organized around the moot court.

As far as the writer knows, no high school has yet organized and maintained successful exploratory courses for the professions, though some principals have insisted that it is quite as logical a thing to do as to give these courses for the trades, and high school pupils have asked that it be done. It is to be hoped that some adventurous soul, who is at the same time wise and capable, will undertake this difficult task in the near future. In the meantime it seems necessary to be content with what the academic and scientific subjects of the curriculum contribute to exploration for the professions. In the hands of teachers who are alive to their opportunities, this contribution may be of greater value than is usually realized.

Making exploratory courses more effective. In the preceding discussion questions have been raised at times concerning the effectiveness of the vocational exploration provided by means of some of the subjects which educators are in the habit of classifying in the tryout or exploratory group. There can be no doubt that the exploratory values of these subjects as taught in most schools can be multiplied many times.

A first step in this direction is to make the teacher more fully conscious of the fact that his subject is rich in exploratory

possibilities and that it is an important part of his job to see that these possibilities are realized. Many teachers give this matter little thought.

A second step is to increase the number of elements in the course which are identical with or similar to elements of the occupation for which the course is exploratory. This can usually be done to a marked extent without interfering in any way with the other than exploratory purposes of the course. In fact, practical arts courses have often been made more interesting and successful by this very means. Pupils like to do things in shop and laboratory that are done by workers in real life rather than to do exercise jobs only.

A third step is to modify methods of teaching and class management so that some of the best features of the working environment of the occupation are brought into the work of the school subject. A good illustration of this is found in those industrial arts shops where the class is divided into groups with a pupil foreman in charge of each group, the teacher serving at times as a sort of shop superintendent as well as teacher. Production jobs done under conditions similar to those of actual employment by a teacher who appreciates the exploratory values for his pupils of what is going on are quite as practicable in case of agriculture, household arts, and commercial subjects as in case of industrial arts subjects, and without sacrificing other values of the work.

Need for measuring the effectiveness of exploratory courses. Every course that is offered with an exploratory purpose needs to be subjected occasionally to the closest scrutiny in order to make sure that it is actually performing this function effectively. Unfortunately no adequate method of measuring the effectiveness of such courses has yet been developed. It has been taken for granted that a course which had this as one of its announced purposes was making good. Administrative authorities and teachers of many school systems assume that their boys and girls are obtaining a valuable exploratory service from courses that function very imperfectly in this respect. It is high time that such courses were called to account.

But there is no objective standard for judging their worth, for determining the extent to which pupils' vocational interests and plans have been influenced by their experiences in these courses. Efforts to evaluate vocational guidance activities have

either ignored vocational exploration or failed to separate it from other parts of the program. Occasionally a subjective judgment from industry is illuminating, such as that made by the associate supervisor of training in R. R. Donnelly and Sons Company of Chicago, when he said, "Boys brought to us by printing teachers are vocationally 'set' nine times out of ten. Their course in printing has been truly a 'finding' course."¹ However, very few employers are able to make such a statement. A few principals, directors, and supervisors form subjective judgments of the effectiveness of exploratory courses on the basis of their observation. But what is needed is a set of criteria as to content, organization, and methods of teaching to be used as standards in judging the value of an exploratory course; or some kind of set of standardized objective tests to be given the pupils in order to measure results of courses given for this purpose. A record of such results would be of value in counseling individual pupils as well as in determining how effectively the exploratory course is really functioning.

Vocational exploration by means of other than practical arts courses. From what has been said thus far it should not be assumed that agricultural, commercial, household arts, and industrial arts courses are the only ones in junior and senior high school that have exploratory value. It has already been noted that music and art courses are sometimes referred to as exploratory. It is true, also, that every other subject found in the secondary school program has vocational exploratory values to some extent, even though much less has been said about it than in the case of the practical arts. Mathematics, English, chemistry, physics, biology, etc., help pupils to discover aptitudes, interests, and limitations that have vocational significance for them just as truly as do the practical arts subjects. Many an industrial chemist discovered in high school chemistry the interest and aptitude that influenced him to choose his present occupation. And many a would-be engineer decided in favor of some other occupation because of his troubles with high school mathematics.

In view of these facts it seems to be highly desirable that educators generally and high school teachers in particular become

¹ G. M. HORT, "Vocational Guidance from the Point of View of Industry," Monographs on Vocational Education, 1925 Series, No. 2, p. 27, Chicago: Vocational Education Association of the Middle West, 1925.

more conscious of the exploratory possibilities of secondary education and provide more adequately for realization of these possibilities. There can be no question that most teachers could make their courses serve the vocational exploratory purpose more effectively and at the same time make them more interesting to their pupils without sacrificing any of the other values now derived from the courses. Suggestions concerning how this can be done for the practical arts subjects, presented on pages 146-147, are applicable here also. Of course, attention to information concerning the requirements and opportunities of occupations based upon the subject should accompany any efforts made by a teacher along this line. (See Chap. VII.)

Vocational exploration by means of extracurricular activities. In practically all junior and senior high schools, vocational exploratory experiences are available to boys and girls through activities, often called "extracurricular" activities, such as the school paper, dramatic and debating societies, work in the school cafeteria, and clubs of various sorts. Seldom is the exploratory purpose prominent, or even present, in the minds of the organizers of these activities, but this purpose is served for many a high school boy or girl, nevertheless. For example, newspaper careers, both on the news gathering and editorial side and on the business side, have been started by work on the high school paper. Some schools have undertaken to organize their entire student body into clubs, the individual's interests and hobbies determining the club to which he belongs. Notable among these was the Washington Junior High School, Rochester, N. Y., with more than 60 clubs. In 1934 this school became a five-year junior-senior high school, grades 8 to 12. With the change it seemed necessary to abandon so comprehensive a club program. The following statement is taken from a bulletin entitled "Clubs" published by the school before the change was made:

The club system aims to provide for every kind of activity. For some children it is interest in wireless; for many browsing around a book shelf or collecting stamps; for others exchanging bits of camp lore; for still others excursions into the woods for birds or flowers. After three years it is difficult to conceive of a boy or girl who has not developed an enthusiasm for some hobby.

Clubs are intrinsically avocational, distinct in spirit from ordinary school work. But in many instances they offer further field for explora-

tion and become vocational. More than one boy has caught a vision that revolutionized his plans for life work. Often a latent talent whose existence might never have been detected is brought to light. A lad, who intended to leave school at the end of the eighth grade, spent one term in the Landscape Gardening Club and thereupon planned for high school; another of supposedly ordinary ability, exhibited through the Pottery Club an apparent native skill in sculpturing.

Since the corner stone of the junior high school is justice for the individual, every student must be given an equal chance adapted to his abilities and aptitudes. In the club this doctrine of individual justice is emphasized. The students themselves elect a club in accordance with their own ideas, each one choosing the thing he likes best. "And no one shall work for money, and no one shall work for fame, but each for the joy of working. . . ."

School clubs in some ways resemble the informal education of old Greece where the master was one with his pupils who clustered about him in small groups and, with a common interest at heart, developed wisdom and character. The modern ideal, however, is not limited in its scope, but embraces all activities of life. On Friday morning from eleven to eleven-fifty, Washington Junior High School presents the unique picture of eighteen hundred boys and girls engaged in the pursuit of happiness, each in his own way.

According to the students' handbook of the Washington High School, which is the present name of this Rochester school:

There are and will be various clubs organized to meet hobby interests when and as such interest exists. These clubs are found in fields of the fine arts as well as the manual arts. They include various phases of collecting as of stamps, coin, geological, and botanical specimens. Handicraft clubs in many forms, study and correspondence clubs, are all possible. The only requirements to be met are that a sufficient interest be shown on the part of the pupils, a director found, and the time and place of meetings agreed upon through the director of extra-curricular activities of the school.

Koos,¹ in a summary of the general literature on extracurricular activities, gives a list of those mentioned at least twice in forty publications (mostly magazine articles) dealing with this subject. In all, 145 different organizations or activities are included in the list. Leaving out the foreign-language, historical, geographical,

¹LEONARD V. KOOS, "Analysis of the General Literature on Extracurricular Activities," *Extracurricular Activities*, Twenty-fifth Yearbook, National Society for the Study of Education, Part II, pp. 21-22, Bloomington, Ill.: Public School Publishing Company, 1926.

mathematical, physical and athletic, civic-social, moral, and miscellaneous organizations, we have the following activities in Koos's list, many of which have, or may have, important exploratory values:

Literary

English clubs.
Literary societies.
Library clubs.
Booklovers' clubs.
Reading clubs.
Mythology clubs.
Short story clubs.

Forensic and Declamatory

Debating societies.
Discussion clubs.
Storytelling clubs.
Declamation clubs.
Public speaking clubs.
Oratory clubs.

Musical

Musical organizations.
Chorus.
Choral clubs.
Glee clubs.
Boys' glee clubs.
Girls' glee clubs.
Orchestras.
Bands.
Mandolin clubs.
Instrumental clubs.
Music clubs.
Music appreciation clubs.

Commercial

Commercial clubs.
Typewriting clubs.
Penmanship clubs.

Journalistic

Journalism or publications.
Editorial staffs.
Writers' clubs.
Press associations or clubs.
School papers.
Magazines.
Annuals.

Dramatic

Dramatic clubs.
Plays.

Class plays.

Motion picture or scenario clubs.

Scientific

Science clubs.
Biology clubs.
Botany clubs.
Nature study.
Bird clubs.
Wildflower clubs.
Chemistry clubs.
Electrical clubs.
Astronomy clubs.
Radio clubs.
Wireless clubs.

Industrial

Industrial arts clubs.
Aircraft clubs.
Agriculture clubs.
Gardening clubs.

Home Economics

Home-economics clubs.
Cooking clubs.
Luncheon activities.
Sewing clubs.
Millinery clubs.
Needlecraft clubs.
Crochet clubs.
Embroidery clubs.
Knitting clubs.
Laundry clubs.
Home-nursing clubs.

Arts and Crafts

Art clubs.
Sketch clubs.
Poster clubs.
Cartoon clubs.
Illustration clubs.
Camera clubs.
Handicraft clubs.
Basketry clubs.
Pottery clubs.
Gift clubs.

It will be seen that many of these clubs offer opportunities for exploring vocational interests and aptitudes. Possibility of changing from one club to another under certain conditions is, of course, desirable. There is, moreover, the possibility of increasing the number of clubs that appeal to vocational interests and of supplementing the actual work done with information concerning occupational opportunities.

It should be noted also that management of athletic teams, class organizations, school publications, plays, and the like afford good opportunities for exploration in the field of business.

Vocational exploration by means of part-time employment. The possibilities of vocational exploratory experiences outside the school for high school pupils have had but little attention as yet on the part of school authorities. In discussing these possibilities, it is well to note that a considerable percentage of boys and a smaller percentage of girls are engaged in some kind of employment outside school hours. Some of them work Saturdays and Sundays, while many work after three or four o'clock on school days and Saturdays as well. It should be noted, also, that a large percentage of high school boys and girls spend their summer vacations in some kind of employment, though economic conditions in recent years have greatly reduced opportunities for both part-time and summer-vacation wage earning on the part of high school youth.

With considerable numbers of boys and girls while still in school engaging to some extent in the actual work of business and industry, it is evident that very many occupational choices must be determined by these out-of-school experiences. Here is genuine exploratory work for high school pupils on a large scale. The difficulty is that part-time and vacation employment is almost wholly haphazard, undirected exploratory work. The boy who works after school or Saturdays or during summer vacations is even less concerned about what the job has in it for him, aside from wages, than is the one who is leaving school for full-time employment. What interests this pupil-worker is a job and one that pays well. It matters little to him whether the job is a good one to test his interests and aptitudes. To be sure, some of the work that is done by these pupil-workers is juvenile and has relatively little exploratory value for permanent occupations. On the other hand, much of the work affords the finest

kind of exploratory experiences. As far as exploratory values are concerned, there is little object in a boy's working at a job which he knows in advance is far removed from what he will do as a man. And very many do just this in summer vacations and out-of-school hours.

The way out of the difficulty seems to lie in some sort of school supervision of pupil employment. Instead of letting each pupil find his own job, the school, especially the senior high school, with its knowledge of the interests and aptitudes of individual pupils might attempt to place those who need out-of-school employment in jobs where valuable tests of these interests and aptitudes would be obtained, as far as this is practicable under child-labor laws and other limiting restrictions. This would be a big undertaking, to be sure, when summer employment as well as after-school employment is taken into account, but it would take advantage of a wonderful opportunity to provide the best type of vocational exploration for many high school pupils, and at the same time guard against excessive hours of employment for them while they are attending school.

An interesting illustration of part-time and summer employment for purposes of vocational exploration is reported from Radcliffe College.¹ In this case work is done without pay if part time, and with maintenance only if summer vacation work. During the college year students, as a rule, do not give more than one-half day each week to this work. A few high schools have undertaken a similar program, but this type of vocational exploration under school supervision has, as yet, hardly made a beginning.

Exploration by means of part-time vocational courses. A considerable number of school systems have established a type of vocational education program which involves part-time employment for high school pupils. This type of program, called a "cooperative" high school course or an "apprenticeship" course in diversified occupations, depending upon certain administrative arrangements, involves cooperation between school and employer. While planned in either case for vocational preparation purposes, this course provides also valuable exploratory experiences under

¹ EDITH G. STEDMAN and MARY MANSON, "Vocational Tryouts for College Students," *Occupations: The Vocational Guidance Magazine*, XII (January, 1934), 54-59.

the actual conditions of industry or business. The usual arrangement is for the pupil to spend one-half his time in school and the other half in employment at an occupation which he expects to follow permanently. Under the cooperative course the period of alternate work and school varies from one week to several weeks. In case of the diversified occupations program, one-half of each school day is usually spent in school and the other at work. In either case, the schoolwork is supposed to deal to a great extent with the theory and the related science or other matter of the occupation, and a representative of the school, called a "coordinator," has a certain amount of supervision over the employment, which is secured for the pupil by him.

While the pupil enters this type of course with his choice of occupation made, nevertheless the first few months of work serve either to confirm that choice or to convince him that he has made a mistake. If he feels that a mistake has been made or if the coordinator comes to this conclusion, the two go over the matter together and decide upon some other occupation. Such changes are quite common under this plan. Indeed, it is an important feature of the plan that these changes should be made before a long period of training has been carried on and before full-time employment is begun.

A description of the diversified occupations program in Lewiston, Mont., a town of 6,000 population, will be found in the magazine *Occupations*, for February, 1935.¹

Limitations of occupational exploratory experiences for pupils. There are, to be sure, important limitations upon exploratory experiences provided by the school. It has already been noted that experiences of this character now offered cover a comparatively narrow range of occupations. Difficulties in the way of extending the range, either within the school or outside it, under school supervision have been noted also. It is true, moreover, that actual conditions of employment as to hours of work, necessity for production, social environment, etc., are not reproduced in the school exploratory work. On this account there are some pupils to whom the work of an exploratory course appeals who find themselves unsuited to the same work under the

¹L. O. BROCKMANN, "Guidance through Doing," *Occupations: The Vocational Guidance Magazine*, XIII (February, 1935), 413-416.

actual conditions of industry or business. Then there is the difficulty of obtaining teachers who are technically well prepared to do this kind of teaching, and the further difficulty that few of those who have the technical preparation have anything like an adequate conception of the exploratory function of their work.

Many difficulties are encountered when one undertakes to provide exploratory experiences for pupils by placing them in part-time, afterschool, or vacation employment. Most junior high school pupils are too young to be placed in work that provides valuable exploratory experiences. Many employers will not be bothered with part-time or vacation workers of any age if they can help it. Even senior high school pupils find that few of the summer jobs open to them are in occupations that offer permanent attractions to them. Other limitations and difficulties might be mentioned.

Yet, notwithstanding these limitations and difficulties, exploratory experiences in the high school period such as have been discussed in this chapter already are performing a large service in assisting boys and girls in choosing occupations.

Not only have the various kinds of exploratory work discussed justified their place in the schools; they have pointed the way also to a much larger service in the future when a better understanding prevails of the high school's responsibility for providing adequate vocational exploratory opportunities to its pupils and of how this can be done more effectively. Predictions are always unsafe but present indications point to extensive developments in this type of work in the next few years.

There is nothing quite like experience in helping one decide whether or not he will like an occupation. Since the experience is sure to be more genuine if obtained under actual conditions of business or industry than if obtained in the school, it is probable that much of the development will be in exploratory experiences provided outside the school but arranged for and supervised by the school. We may expect that exploratory experiences will be supplemented more and more by tests of special aptitudes as these tests develop and are made more practicable for school use. But there seems little likelihood that special aptitude tests, important as they are likely to become, will ever take the place of exploratory experiences in a program of vocational guidance.

SELF-ANALYSIS

As indicated earlier, the self-inventory service of a vocational guidance program includes provision for the individual to analyze and rate his personality assets and liabilities as well as to discover these by means of exploratory experiences. Also, as suggested earlier, self-analysis may really be considered as the effort of an individual to bring together in systematic form the facts as he sees them which have been revealed by his exploratory experiences of various kinds. These are the facts concerning his abilities, aptitudes, interests, and personality traits. It should be recognized that the exploratory experiences exercise a profound influence on one's courses of action, whether or not the self-analysis follows.

The function of the self-analysis in vocational guidance is to help the individual to see the facts more clearly, to evaluate them more accurately, and to relate them more directly to the problem of his vocational plans. While the prime concern here is with the significance of this process for vocational guidance, it should be kept in mind that self-analysis has significance also for educational, recreational, and community-service guidance. It is true, too, that a pupil's self-analysis is valuable to the counselor in interviews with that pupil as well as to the pupil directly.

Limitations of self-analysis. Several studies have been made which raise questions concerning the value of the self-analysis. Cogan, Conklin, and Hollingworth¹ found that the correlation between self-estimates of intelligence and scholastic records was consistently lower than that between intelligence test scores and scholastic records; also that "in general the error of self-estimation tends to be half again as great as the average error of the judgment of associates."

Hollingworth² and several other investigators report a tendency on the part of students to overrate themselves on desirable personal qualities and underrate themselves on undesirable

¹LUCY C. COGAN, AGNES M. CONKLIN, and H. L. HOLLINGWORTH, "An Experimental Study of Self-analysis, Estimates of Associates, and the Results of Tests," *School and Society*, II (July 31, 1915), 171-179.

²H. L. HOLLINGWORTH, *Judging Human Character*, New York: D. Appleton-Century Company, Inc., 1922.

qualities as compared with ratings made by their associates. For example, Hollingworth found that 80 per cent of the college students included in her study rated themselves higher on refinement than their associates rated them on the same quality. On the other hand, only 36 per cent rated themselves as snobbish to a higher degree than their associates rated them snobbish. Other studies indicate that self-ratings by junior high school boys and girls are probably less accurate than those of college students. Finally, one investigator¹ concludes that some individuals overestimate themselves on all qualities and others underestimate themselves on all qualities.

In considering self-analysis it should be kept in mind that its value to the pupil directly and its value to the counselor for interviews with the pupil are two distinct things. The pupil cannot avoid forming judgments concerning himself. Self-analysis, as pointed out above, is merely a means by which this is done deliberately and in a systematic manner. In this way the pupil should obtain a better understanding of what his assets and liabilities really are than he would if the matter were left entirely to chance, particularly if he is given proper assistance in making the analysis in a way that will be most useful to him.

After all, it is not how other people rate his abilities and traits that will influence his course of action so much as it is how he rates himself. As Koos and Kefauver point out, "students are guided in their thinking and planning on their own conception of their capacities and not on those they actually possess."² Moreover, in any particular case the fact that teachers or fellow pupils or both rate a pupil lower in certain respects than he rates himself is not adequate proof that his rating may not be the more accurate. It seems quite probable that, as a rule, junior high school pupils will be less accurate in their self-ratings than will college students for the simple reason that their exploratory experiences have been more limited. They have not had as many opportunities to discover their capacities and limitations. This should be made clear to them when they are asked to rate themselves.

¹ EUGENE SHEN, "The Validity of Self-estimate," *Journal of Educational Psychology*, XVI (February, 1925), 104-107.

² LEONARD V. KOOS and GRAYSON N. KEFAUVER, *Guidance in Secondary Schools*, p. 232, New York: The Macmillan Company, 1932.

From the point of view of the counselor the mere fact that a pupil's rating of himself is higher or lower than his ratings by others is significant. The counselor thus has an additional item of information concerning the personality of that particular pupil which will be useful in the counseling interview. However, the counselor will always find it wise to remember that a self-rating is a subjective judgment whose reliability is dependent to a considerable degree upon the maturity and experiences of the one who makes it. It must be kept in mind also that self-ratings furnish only a limited part of the evidence which must be taken into account. Other needed evidence will be considered in the following chapters.

Self-analysis a stimulus to the pupil. Another value of pupil self-analysis that is often stressed is that it stimulates the pupil to self-improvement. Finding it necessary to rate himself on various qualities, he is brought face to face with his weaknesses, often with the result that he takes immediate steps to overcome them or, at least, to reduce them. However, there are some sensitive individuals who are discouraged and disheartened rather than stimulated by this experience.

Self-analysis blanks. Numerous blanks or forms for use in self-rating have been devised. Among the more complete is that prepared by the Boys' Work Division of the International Committee of the Young Men's Christian Association, an organization that has been active in vocational guidance for many years. The blank is too long to be presented here but the introductory statement and Section B will give an idea of its nature.

SELF-ANALYSIS BLANK FOR PURPOSES OF VOCATIONAL GUIDANCE DESIGNED FOR USE BY OLDER BOYS UNDER DIRECTION OF ADULT LEADERS

The purpose of this blank is to help older boys and young men locate their natural interests and capacities, particularly those which tend to show vocational tendencies.

Do not hurry. Selecting one's vocation is serious business.

Be thoroughly honest. Your own particular abilities are what you are seeking to discover.

Let your answers indicate your present interests and ambitions for the future.

Ask questions of your leader if in doubt at any point.

Section B. Personal Characteristics

1. Am I independent and self-reliant; do I like best to lead (in work, games, groups, or "stunts") or am I happier when another leads and I follow and help?

Think it over like this—

- Would I rather be captain, the directing head?.....
 Or, would I just as soon have some leadership but not too much responsibility?.....
 Or, would I much rather do the actual work myself (as mechanic, farm worker, salesman, artist) and let someone else do the directing and the worrying?.....
 2. Am I a team man; can I cooperate?.....
 3. Do I take particular delight in discovering my own way to do things?.....
 4. Am I naturally obedient, following instructions readily?.....
 Or, do I like pretty much to rely on my own judgment?.....
 5. Is it difficult to make my mind stick to a particular thing at a particular time?.....
 6. Do I make a strong finish?.....or quit rather easily?.....
 7. Is it easy and interesting for me to make new friends?.....
 Or, do I enjoy more old friends and acquaintances?.....
 8. As a rule, am I happier when I am with other people?.....
 Or, When I am alone?.....
 9. Can I get along with most people?..... What sort of person annoys me most?.....
 10. Thinking it over carefully, would I rate myself as extra good, fair, or poor on the following matters:
 (Note: Put a check (✓) under Extra Good, Fair or Poor for each quality in the list.)

	Extra good	Fair	Poor
Enthusiasm (full of earnestness or zeal).....
Carefulness (conscientious attention to details).....
Punctuality (being on time).....
Honesty (acting on the square, not somewhat lax).....
Energy (having drive and punch).....
Thrift (saving; not being an easy spender).....
Hopefulness (cheerful rather than gloomy)....
Self-confidence (not overdependent on others).....

11. (a) Have you any habits which you feel might keep you from the largest success in life?.....
 (b) Would you like help or suggestions about avoiding or overcoming certain habits or temptations?.....

Brewer and Lincoln devised the score card shown on page 160, which provides for self-rating in comparison with the require-

A SCORE CARD FOR THE OCCUPATION AND YOURSELF*

(A Comparison of the Needs of the Occupation with Your Ability)

Name..... Date.....

Qualities required for success in the occupation of.....
and the qualities I can develop in that occupation.

Directions: This exercise is planned to aid you in thinking about your future occupation. The first column relates to the qualities demanded by the vocation; the second, to the qualities you can develop if you choose to enter that occupation. At the bottom are spaces for additional qualities required. Mark an X in the appropriate column: 60, very little; 70, not very much; 80, average amount; 90, above average; 100, very great amount.

	Vocation needs					I can develop				
	60	70	80	90	100	60	70	80	90	100
1. Ability to attend to details										
2. Ability to cooperate; tact										
3. Ability to follow directions										
4. Ability to lead other people										
5. Ability to use good English										
6. Accuracy										
7. Adaptability to change and surprise										
8. Cheerfulness										
9. Common sense; good judgment										
10. Courage										
11. Courtesy										
12. Earnestness										
13. Ideals of good citizenship										
14. Ideals of honesty										
15. Ideals of service and unselfishness										
16. Imagination; foresight; planning										
17. Initiative; resourcefulness										
18. Liking for work indoors; † outdoors										
19. Liking for sameness; † variety										
20. Mechanical skill										
21. Mental ability and capacity										
22. Orderliness; system; neatness										
23. Perseverance; industry										
24. Physical strength; health, vigor										
25. Promptness; punctuality										
26. Responsibility; trustworthiness										
27. Self-control; patience										
28. Sense of humor										
29. Speed of work										
30. Sympathy										

* JOHN M. BREWER and MILDRED E. LINCOLN, reproduced by courtesy of the C. H. Stoelting Company, Chicago, Ill.

† Cancel the quality not required by the vocation.

ments of an occupation. However, this score card calls for an estimate of the degree to which the individual who fills it out can develop each of the various qualities on the list, rather than for his estimate of the degree to which he possesses them at the time. Jones¹ suggests the desirability of adding another column to the card with the heading "What I Have Now."

A "Questionnaire for Self-analysis" containing 50 questions, some of a general nature, will be found in Rosengarten's book entitled *Choosing Your Life Work*.² Myers, Little, and Robinson's book for high school students, *Planning Your Future*,³ contains a self-rating chart comprising 21 characteristics on which the pupil is asked to rate himself very poor, poor, fair, good, or excellent.

Making self-analysis more valuable for vocational guidance purposes. While recognizing its limitations, most authorities are agreed that self-analysis is an important part of a comprehensive program of vocational guidance. Koos and Kefauver sum up the matter in these words:

Self-ratings are important in a program of guidance. They supplement other sources of information about the student. They indicate the nature of the student's judgment concerning himself, a judgment that is a primary factor in the selection of types of education and of vocations. To be sure, they cannot be accepted as correct estimates.⁴

There are some, however, who would discourage the use of self-analysis, on the ground that the information gathered in this way is unreliable. For the most part these are thinking of the value of this material to the counselor rather than in terms of the value of self-analysis to the pupil himself. In fact, this point of view is implied in the comment just quoted from Koos and Kefauver. Viewed as a means of helping the pupil to bring together the results of his exploratory experiences of all sorts in an effort better to understand himself, it has far greater value

¹ ARTHUR J. JONES, *Principles of Guidance*, 2d ed., p. 185, New York: McGraw-Hill Book Company, Inc., 1934.

² WILLIAM ROSENGARTEN, *Choosing Your Life Work*, 3d ed., pp. 34-36, New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1936.

³ GEORGE E. MYERS, GLADYS M. LITTLE, and SARAH A. ROBINSON, *Planning Your Future*, p. 412, New York: McGraw-Hill Book Company, Inc., 1940.

⁴ KOOS and KEFAUVER, *op. cit.*, p. 236.

than as an aid to the counselor. Instead of discouraging the use of self-analysis, guidance workers should seek by every possible means to improve its techniques, to the end that the individual's self-ratings become more accurate, and by providing for more extensive study and use of the results by the pupils themselves. There can be little doubt that with a proper understanding on the part of the pupil of its purposes, with a proper setting or "atmosphere" when the blank is filled out, and with a better knowledge of ways to use the information recorded, the self-analysis will become of greater value to the pupil directly, and also indirectly through its use by the counselor.

SUMMARY

The function of the self-inventory service of a vocational guidance program is to give the individual an awareness of his personal assets and liabilities. Exploratory experiences and self-analysis are the principal means used by the schools in accomplishing this purpose. Counseling, which will be discussed in a separate chapter, also contributes to this end. While both exploratory experiences and self-analysis also furnish the school staff with valuable information for vocational guidance purposes their great importance lies in their direct value to the pupils themselves.

Authorities on the junior high school are agreed that exploration by the pupil of his individual tastes, interests, capacities, and other personal characteristics is one of the most important functions of this school. The senior high school, junior college, and even higher educational institutions also serve this purpose but in none of them is it so dominant as in the junior high school.

Certain groups of subjects especially in the junior high school—agricultural, business, homemaking, and industrial arts—are often referred to as tryout or exploratory subjects. The extent to which they are offered and their real value as exploratory experiences differ greatly in different schools. Many teachers of these subjects never think of their work in terms of its value to their pupils in discovering and trying out their aptitudes and interests. It is true, also, that the number of specific occupations for which exploratory courses are provided in junior and senior high school combined is relatively small. In general, however, this objection is not very significant since such courses explore

the more important occupations in which large numbers of people are employed. Courses offered for exploratory purposes will no doubt be far more effective when those who teach them feel keenly the responsibility for helping pupils discover their personal assets and liabilities, when a larger number of elements from the occupations for which the course is exploratory are introduced, and when methods of instruction are used which take account more fully of conditions and practices in the occupations concerned. And the general education values of the course also may be increased by these means. Thus far no satisfactory method of measuring the value of these courses for vocational exploratory purposes has yet been devised, desirable as this would be.

To be sure, all subjects taught in secondary schools serve a vocational exploratory purpose to a greater or less extent. It is desirable that this be more fully appreciated by school people and steps taken to enhance the exploratory values of the entire group of subjects included in the program of studies.

While the activities program is already an important means of exploring vocational interests and aptitudes, its value for this purpose may be greatly increased by careful planning to this end.

Efforts to use part-time, afterschool, and vacation employment for occupational exploratory purposes have met with some success. The fact that this method provides the exploration under actual working conditions makes it peculiarly valuable. But age and other restrictions on employment of youth are a limiting factor.

Notwithstanding their limitations, occupational exploratory experiences provided by means of school courses, extracurricular activities, and part-time employment seem destined to play a more important part in vocational guidance for the reason that no other means of finding out one's suitability for an occupation is so effective as is doing the things of the occupation.

Self-analysis may be considered as an effort to bring together in systematic form the facts one has learned concerning himself by means of various exploratory experiences. Self-analysis is intended to help the individual to see these facts more clearly, to evaluate them more accurately, and to relate them more directly to his vocational plans. While it has important limitations, when a properly prepared blank or form is used and the matter is

wisely presented to youth, self-analysis is an important technique of vocational guidance. Often, also, it stimulates the individual to efforts in the direction of self-improvement, since it brings him face to face with his weaknesses. It is desirable that efforts be made by guidance workers to obtain more accurate and dependable self-analyses rather than to ignore this guidance technique.

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CHAPTER X

THE PERSONAL DATA COLLECTING SERVICE GENERAL DATA, PHYSICAL DATA, INTELLIGENCE RATINGS

In the two preceding chapters attention has been given to services provided by the school for the purpose of helping the individual student to acquire information concerning occupations and concerning his own assets and liabilities. The objective of these two services is to supply the individual with basic data that should be helpful to him in arriving at an occupational choice. It hardly need be said that similar data concerning school, recreational, and community-service opportunities and requirements, and the same data concerning himself are necessary if the individual is to make wise educational, recreational, and community-service plans. And, it may be remarked in passing, assistance in making these plans should not be overlooked just because emphasis is placed on vocational plans. In fact, the latter cannot be worked out successfully independently of educational, recreational, and community-service plans.

Attention must now be turned to the equally important service of supplying the school with data concerning the individual student for use in the vocational counseling, placement, and follow-up services which will be considered in later chapters. Here, as in the previous chapter, individual differences are fundamental. Again it should be kept in mind that the data under discussion are basic for guidance services in other fields as well as in the vocational.

Kinds of personal data needed. What does the vocational counselor need to know concerning the individual whom he undertakes to assist in the difficult task of choosing a suitable vocation? Writers on the subject are generally agreed that provision should be made for bringing together the following types of data for use in counseling and also in placement and follow-up work:

1. General data—information that will be helpful in locating the individual and in making contacts with those who have responsibility for him.

2. Physical data—information concerning the individual's health and physical characteristics.

3. Psychological data—information concerning the individual's mental characteristics such as intelligence, special aptitudes and limitations, and personality traits.

4. Social environment data—information concerning home and other social environment conditions and factors that influence or seem likely to influence the individual in his vocational plans.

5. Achievement data—information concerning what the individual has done both in school and outside of it.

6. Data concerning the individual's educational and vocational plans.

Completeness of needed data. Obviously any one of the six items in the above list may be dealt with in general terms or in great detail. The picture presented may be impressionistic in character or as detailed as a Corot. However, in actual practice there is no object in bringing together more information concerning any item in the list than seems likely to be used. Much criticism has been leveled, and justly, at wasting the time of teachers and others in piling up data that are never used. Provision for use of the data gathered must, therefore, determine the completeness of the record.

If a well-planned counseling program is in effect, or is soon to be in effect, with an adequate staff of counselors who have the knowledge and the skill and the will to use such material effectively, then fairly complete data are desirable. If, on the other hand, the counseling setup is weak, it is usually wasteful to provide such a well-selected kit of high grade tools as make up a good system of personal data records for use in the counseling service. In any given situation the person responsible for the vocational guidance program, in conference with his superior officers and with his fellow teachers in the school system, should determine just what parts of the data discussed in this chapter are needed. It is understood, of course, that some of the data thus assembled will be used in other parts of the school program as well as in vocational guidance.

GENERAL DATA

A limited amount of general information concerning every pupil is, of course, necessary. Its purpose is to facilitate contacts with the pupil and with those who are most directly concerned with his welfare. The information needed includes the pupil's name, street address, and telephone number, the name of parent or guardian, and of home-room teacher or other school sponsor. His school program for the current semester, giving the room in which he may be found at any school period of the week is, also, an important part of the general data needed.

PHYSICAL DATA

Of course, the race, sex, and date of birth—year, month, and day of the month—are the first items that claim attention. Height and weight, when considered in relation to physical maturity, are important as indicating fitness or unfitness for certain types of occupations. Physical handicaps, if any, should be considered, including hearing (percentage of normal for each ear); sight (percentage of normal and nature of correction made for the defect); color blindness; deformity of limbs or body (nature and extent of defect). Other items of information needed include condition of heart; condition of lungs; condition of nervous system; past sicknesses (nature of, when, how serious). A photograph of the individual is considered desirable by some as an aid in recalling his personality characteristics when consulting his records. This is particularly valuable in connection with the placement service, but is often useful also to a counselor in preparing for a counseling interview.

While their immediate value in vocational counseling seems to be negligible, it is quite possible that fingerprints may be added to the physical data recorded in the school for use in connection with placement and for other purposes.

Because changes in some of the physical data listed above may be considerable in an individual during the six years that make up the secondary school period, it is, of course, necessary that the record be brought up to date from time to time and the time of recording be given. The same is true, to a lesser extent, after the individual passes beyond the high school period.

PSYCHOLOGICAL DATA

It has already been noted that the psychological data needed for vocational guidance purposes are of three different kinds—data concerning the individual's intelligence, his special aptitudes, and his personality traits. It seems best to consider each kind separately, beginning with data concerning intelligence.

Nature of intelligence. While in recent years the term "intelligence" has been used extensively in the literature of education, it is not always clear just what the person who uses it means by the term. Some writers seem to assume that their readers will understand what is meant while others apparently have themselves only a very hazy concept of the term. This is not surprising when one considers the state of mind on this matter among well-known psychologists. Witty points out that "during the period of rapid increase in the number of instruments for the measurement of intelligence, few persons sought an answer to the question: What is intelligence? Most mental testers blithely tested intelligence without seriously inquiring about that which they were trying to measure."¹

Hines starts his discussion of the nature of intelligence with the statement: "No one knows precisely what intelligence is."² Of course, the same might be said of electricity. However, notwithstanding the difficulties involved in the undertaking, the author of this book feels under obligations to his readers to present briefly certain points of view expressed by psychologists concerning the nature of this elusive human characteristic. Readers must have some idea of the sense in which the term is used if they are to understand the author's discussion of intelligence testing in relation to vocational guidance.

Terman, whose contribution to the development of intelligence tests is as important as that of any other American psychologist, says: "An individual is intelligent in proportion as he is able to carry on abstract thinking."³

¹ PAUL O. WITTY, "Intelligence: Its Nature, Development, and Measurement," in *Educational Psychology*, by CHARLES E. SKINNER and associates, p. 438, New York: Prentice-Hall, Inc., 1936.

² HARLAN CAMERON HINES, *Measuring Intelligence*, p. 1, Boston: Houghton Mifflin Company, 1923.

³ L. M. TERMAN, "Intelligence and Its Measurement," *Journal of Educational Psychology*, XII (March, 1921), 128.

Van Wagenen treats intelligence as "capacity to learn and to adjust to relatively new and changing conditions."¹

Freeman expresses much the same idea as Van Wagenen when he says: "Intelligence is represented in behavior by the capacity of the individual to adjust himself to new situations, to solve new problems, to learn."²

Boynton defines intelligence as "an inherited capacity of the individual which is manifested through his ability to adapt to and reconstruct the factors of his environment in accordance with the most fundamental needs of himself and his group."³ He stresses the inherited character of intelligence further when he says:

It seems that intelligence should be restricted solely to those characteristics which are heritable; it should be made entirely independent of the amount of knowledge which a person has. Thus intellect is seen to be a more inclusive term, incorporating not only the idea of inherited capacity, but also the idea of acquired ability or knowledge.⁴

Spearman has presented what is called the "two-factor theory" of intelligence, one factor being general and the other specific.⁵

Thorndike at one time considered it desirable to recognize three kinds of intelligence; namely, abstract, mechanical, and social,⁶ the first of the three being defined much as Freeman defines intelligence.

Thurstone has recently stressed what is called the "factorial analysis" theory which recognizes intelligence as consisting of several abilities, seven of which have thus far been identified: (1) number facility, (2) word fluency, (3) visualizing, (4) memory,

¹ M. J. VAN WAGENEN, "Intelligence and Its Measurement," in *Readings in Educational Psychology*, by CHARLES SKINNER and associates, p. 401, New York: Farrar & Rinehart, Inc., 1937.

² FRANK N. FREEMAN, *Mental Tests*, pp. 489-491, Boston: Houghton Mifflin Company, 1926.

³ PAUL L. BOYNTON, *Intelligence: Its Manifestations and Measurements*, pp. 19-20, New York: D. Appleton-Century Company, Inc., 1933.

⁴ *Ibid.*, p. 20.

⁵ CHARLES S. SPEARMAN, *The Nature of Intelligence and the Principles of Cognition*, pp. 5-6, 341-343, New York: The Macmillan Company, 1927.

⁶ WITTY, *op. cit.*, p. 439.

(5) perceptual speed, (6) induction, and (7) verbal reasoning.¹ He implies that others may be added to the list as the result of later and more thorough analysis.

Examination of these definitions indicates a rather surprising amount of agreement as to the nature of intelligence. Some prefer to break it up into its elements rather than to treat it as a unit. Some stress more than others the idea that it is inherited—a native capacity. Careful reading of the various authorities quoted would reveal differences of opinion concerning the modifiability of intelligence under the influences of environment. But through all of the concepts of the term presented there appears the idea so well phrased by Freeman: “capacity of the individual to adjust himself to new situations, to solve new problems, to learn.”²

While psychologists are agreed that it is quite impossible at any point in an individual's life to make a clear-cut distinction between his native capacity “to adjust himself to new situations, to solve new problems, to learn” and the effects of general environment and formal education upon that capacity, nevertheless it has long been recognized both by psychologists and by laymen that there are important differences among individuals in such native capacity. In this respect human beings are not born equal. They range from the helpless idiot on the one hand to the most brilliant all-round genius on the other. These two appear at birth to be equally helpless. One, lacking in that native capacity, remains helpless as long as he lives, in spite of the most favorable environment. The other, rich in this same native capacity, develops rapidly under the influences of environment until he is able to take at full stride life's most difficult situations. There is ample evidence to indicate that human beings as a whole are distributed between these two extremes of native capacity in accordance with the normal curve of distribution.

Even those who insist most strongly that an important part of an individual's intelligence as defined by Freeman is the result of environmental influences are ready to grant that by far the larger part is inherited. According to a summary of the scientific evidence on this point made by Burks, about 17 per cent of the

¹ L. L. THURSTONE, “A New Conception of Intelligence,” *Educational Record*, XVII (July, 1936), 441–450.

² FREEMAN, *op. cit.*

differences in intelligence among individuals is due to differences in home environment, though "home environment in rare, extreme cases may account for as much as 20 points of increment above the expected, or congenital, level."¹ While Wellman and Stoddard maintain that their recent studies "reveal large changes in I.Q. in both upward and downward directions,"² due to changes in environment, they indicate that the favorable period for such changes in I.Q. is early childhood. This means that at the high school age an individual's intelligence is relatively stable—that its modifiability is limited rather narrowly. Bingham concludes that, according to the evidence now available, there is about 1 chance in 22 that during a four-year high school period an I.Q. will increase or decrease as much as 12 per cent.³

School attainment as a measure of intelligence. In this connection it should be kept in mind that school attainment by the pupil long was the only generally accepted measure, and still is an important measure, of that pupil's intelligence. It must be recognized that, taking pupils as a whole, school attainment has proved a fair test of this quality. Those who pass from grade to grade with little or no difficulty until they graduate from high school, taken as a group, are undoubtedly superior in intelligence to the group consisting of those who drop out before reaching the goal of graduation. The school is a selective agency which sifts out individuals of low intelligence. Many employers recognize this and insist upon employing only high school graduates, not so much because of the superior training of these but because they have gone through a selective process which has tested their intelligence and certain other qualities that the employer considers important.

But the school functions far from perfectly as a sieve of intelligence. A considerable number of very capable boys and girls find their way in some manner through its meshes, while others of very mediocre ability stay in throughout the high

¹ BARBARA S. BURKS, *Nature and Nurture: Their Influence upon Intelligence*, Twenty-seventh Yearbook, National Society for the Study of Education, Part I, Chap. X, p. 223, Bloomington, Ill.: Public School Publishing Company, 1928.

² BETH L. WELLMAN and GEORGE D. STODDARD, "The IQ: A Problem in Social Construction," *The Social Frontier*, V (February, 1939), 151.

³ WALTER VAN DYKE BINGHAM, *Aptitudes and Aptitude Testing*, p. 40, New York: Harper & Brothers, 1937.

school period. Besides, in counseling, one does not know generally which pupils will remain through high school and which will drop out at the various stages along the way. The counselor has to deal with differences in intelligence among those who are in school at any given time. Moreover, among those who graduate or reach any other particular level of attainment, there are striking differences in the quality of work done and equally striking differences in marks or grades received for work which is substantially of the same quality.

It is a well-known fact that a pupil's marks in school subjects do not always indicate his ability to meet even the situations presented to him by those subjects, to say nothing of life situations generally. It is highly desirable, therefore, that for vocational guidance purposes the school attainment of pupils both with respect to the grade level reached at a given age and with respect to the quality of work done as shown by school marks received, should be supplemented by a more accurate and less subjective measure of intelligence.

The nature and purpose of intelligence tests. In order to provide a means of measuring more accurately and more quickly than by achievement in school subjects what he chose to call the "general intelligence" of children, Alfred Binet, a French psychologist, devised and presented to the world a little more than 30 years ago a measuring instrument of general intelligence. These tests were further developed with the assistance of an associate, Simon, and became known as the Binet-Simon tests. They were adapted to use in America by Lewis M. Terman of Stanford University, under the name "Stanford Revision of the Binet-Simon Tests of General Intelligence."

It is necessary that each child who takes the Binet-Simon tests, either in the original form or as revised by Terman, does so individually. The tests consist of a variety of questions to be answered and things to be done, mainly the latter, based upon the environmental experiences of child life and graded according to age. The tests seek to measure not primarily knowledge but ability to use knowledge readily in meeting situations. It is assumed that the child in a given group who meets most successfully, age considered, the carefully selected situations provided by the tests is the most intelligent, and the child who meets these situations least successfully is the least intelligent of the group.

By giving the tests to a large number of children of different ages from different social environments, norms were established for each age. After these norms were established it became possible to give the tests to a child of given age and compare his test score with the norm for that age. If the score is greater than the norm the child is rated as above average in intelligence; if less than the norm, he is rated as below average in intelligence. Thus it becomes possible to determine the "mental age" of a child, this being greater than his chronological age if he is above average, and less than his chronological age if below average in intelligence. For example, a twelve-year-old child whose rating is 10 per cent above the norm for twelve years is considered as having a mental age 10 per cent above his chronological age, or thirteen and two-tenths years.

The term "intelligence quotient" (I.Q.) was adopted to indicate the result obtained by dividing the mental age by the chronological age and multiplying the result by 100. The twelve-year-old child just mentioned would thus have an I.Q. of 110. Were his rating the same as the norm for twelve-year olds his mental age would be the same as his chronological age and his I.Q. would then be exactly 100. Thus, once the validity and reliability of tests of this kind are accepted and the tests are scored properly, there becomes available a means of comparing the intelligence of individuals just as it has long been possible to compare their height or weight. To put the matter differently, it becomes possible to tell how tall an individual is in the matter of intelligence.

Group tests of intelligence. Soon after the Stanford Revision of the Binet-Simon Tests was presented to the public it became evident that testing individuals one at a time was too slow for practical purposes if intelligence-tests results were to have extensive use. Therefore, psychologists devised tests, observing the same general principles as those governing the development and use of individual tests, that could be given to a large group at one time. The Army Alpha and Beta tests, developed during the First World War for use in testing army personnel, constitute an outstanding illustration of this effort. The Terman Group Test and the Otis Self-Administering Test are other well-known illustrations.

Accuracy and reliability of intelligence tests. When the complex nature of the thing to be measured, the newness of the

effort to provide a suitable measuring instrument, and the carelessness and inexperience of many who have attempted to use this instrument are considered, it is not surprising that there is still much popular skepticism concerning the accuracy and reliability of these tests. To be sure, no one claims for them that they can be applied to any human mind with the accuracy attained in linear measure. In fact, it is generally agreed that results obtained from their use should be looked upon as approximate rather than as accurate measures. But anyone who investigates the matter in a thorough, scientific manner must grant that a well-chosen intelligence test properly administered and scored is a better measure of abstract intelligence than school records or anything else yet devised, and that such a test has the great advantage of requiring only a brief time to obtain the result. In this connection it is well to remember that as simple an instrument of measurement as the yardstick required decades of time and even a royal decree to bring it general acceptance as a standard of measure. And centuries more passed before linear measure attained that degree of accuracy required in industry today which is represented by the Johansen blocks, accurate to a millionth of an inch.

Terman's results. More than 20 years ago Terman found, as a result of giving the Stanford Revision of the Binet-Simon Intelligence Tests to 1,000 children selected at random, that their intelligence quotients were distributed as follows:

The lowest 1% go to 70 or below; the highest 1% reach 130 or above.
The lowest 2% go to 73 or below; the highest 2% reach 128 or above.
The lowest 3% go to 76 or below; the highest 3% reach 125 or above.
The lowest 5% go to 78 or below; the highest 5% reach 122 or above.
The lowest 10% go to 85 or below; the highest 10% reach 116 or above.
The lowest 15% go to 88 or below; the highest 15% reach 113 or above.
The lowest 20% go to 91 or below; the highest 20% reach 110 or above.
The lowest 25% go to 92 or below; the highest 25% reach 108 or above.
The lowest 33½% go to 95 or below; the highest 33½% reach 106 or above.¹

Making allowance for the fact that boundary lines between the groups mentioned below are arbitrary, Terman suggested the following classification of intelligence quotients:

¹ L. M. TERMAN, *The Measurement of Intelligence*, pp. 78-79, Boston: Houghton Mifflin Company, 1916.

I.Q.	Classification
Above 140.....	"Near" genius or genius
120-140.....	Very superior intelligence
110-120.....	Superior intelligence
90-110.....	Normal or average intelligence
80-90.....	Dullness rarely classifiable as feeble-mindedness
70-80.....	Border line deficiency, sometimes classifiable as dullness, often as feeble-mindedness
Below 70.....	Definite feeble-mindedness*

* L. M. TERMAN, *The Measurement of Intelligence*, pp. 78-79, Boston: Houghton Mifflin Company, 1916.

By comparing these two tables it will be seen that, according to Terman, approximately 20 per cent have superior intelligence or better, 60 per cent have approximately average or normal intelligence, and 20 per cent fall below normal in the dull and feeble-minded groups. These results of Terman's early investigations are not greatly modified by his later researches which culminated in a recent revision of his tests.¹

Army intelligence tests results. A very similar classification resulted from giving the Army tests of intelligence to 1,700,000 draft soldiers during the First World War as will be seen from the following familiar table:

DISTRIBUTION OF INTELLIGENCE AS SHOWN BY THE ARMY INTELLIGENCE TESTS*

Intelligence grade	Definition	Score	Approximate per cent
A	Very superior	135-212	4.5
B	Superior	105-134	9.0
C+	High average	75-104	16.5
C	Average	45-74	25.0
C-	Low average	25-44	20.0
D	Inferior	15-24	15.0
D- and E	Very inferior	0-14	10.0

* From C. S. YOAKUM and ROBERT M. YERKES, *Army Mental Tests*, p. 17. New York: Henry Holt & Company, Inc., 1920.

In discussing these letter ratings, Yoakum and Yerkes go on to say:

A = Very superior intelligence. This grade is ordinarily earned by only four or five per cent of a draft quota. The "A" group is composed

¹ L. M. TERMAN and MAUD A. MERRILL, *Measuring Intelligence*, Boston: Houghton Mifflin Company, 1938.

of men of marked intellectuality. "A" men are of high officer type when they are also endowed with leadership and other necessary qualities.

B = Superior intelligence. "B" intelligence is superior, but less exceptional than that represented by "A." The rating "B" is obtained by eight to ten soldiers out of a hundred. The group contains many men of the commissioned officer type and a large amount of non-commissioned officer material.

C+ = High average intelligence. This group includes fifteen to eighteen per cent of all soldiers and contains a large amount of non-commissioned officer material with occasionally a man whose leadership and power to command fit him for commissioned rank.

C = Average intelligence. It includes about twenty-five per cent of the soldiers. Excellent private type with a certain amount of fair noncommissioned officer material.

C- = Low average intelligence. This group includes about twenty per cent. Although below average in intelligence, "C-" men are usually good privates and satisfactory in work of a routine nature.

D = Inferior intelligence. It includes about fifteen per cent of soldiers. "D" men are likely to be fair soldiers, but they are usually slow in learning and rarely go above the rank of private. They are short on initiative and so require more than the usual amount of supervision. Many of them are illiterate or foreign.

D- and E = Very inferior intelligence. This group is divided into two classes: (1) "D-" men, who are very inferior in intelligence but are considered fit for regular service; and (2) "E" men, those whose mental inferiority justifies their recommendation for development battalion, special service organization, rejection, or discharge. The majority of "D-" and "E" men are below ten years in "mental age."¹

Intelligence ratings and school expectancy. Since this chapter is concerned with collecting data for use by the school in its vocational guidance activities, the significance of an individual pupil's intelligence rating for this purpose claims attention. How is this rating of value, for example, in counseling a high school boy or girl concerning vocational plans? It is clear from the data already presented, namely, those obtained by Terman from individual tests and by the Committee on the Classification of Personnel in the Army from group tests—data supported and substantiated by the results of tests given more recently to hundreds of thousands of school children—that a pupil's intelli-

¹ C. S. YOAKUM and ROBERT M. YERKES, *Army Mental Tests*, pp. 22-23, New York: Henry Holt & Company, Inc., 1920.

gence rating must have an important relation to the amount of schooling which it is practicable for him to undertake. Both Terman and Yoakum and Yerkes made pertinent comments on this point several years ago.

Terman said: "Those testing 80 to 90 (I.Q.) will usually be able to reach the eighth grade, but ordinarily only after from one to three or four failures."¹ Referring to those whose I.Q.'s are 90 to 100, he said:

The high school does not fit their grade of intelligence as well as the elementary and grammar schools. High schools probably enroll a disproportionate number of pupils in the I.Q. range above 100. That is, the average intelligence among high school pupils is above the average for the population in general. It is probably not far from 110. College students are, of course, a still more selected group, perhaps coming chiefly from the range above 115.¹

It will be recalled that according to Terman about 20 per cent have an I.Q. of 90 or less and about 80 per cent have an I.Q. of 110 or less.

In discussing the same point in terms of the Army Alpha Test, Yoakum and Yerkes put it this way:

The immense contrast between "A" and "D—" intelligence is shown by the fact that men of "A" intelligence have the ability to make a superior record in college or university, while "D—" men are of such inferior mentality that they are rarely able to go beyond the third or fourth grade of the elementary school, however long they attend. In fact, many "D—" and "E" men are of the moron grade of feeble-mindedness. "B" intelligence is capable of making an average record in college. "C+" intelligence cannot do so well, while mentality of the "C" grade is rarely capable of finishing a high school course.²

The conclusions expressed by Terman and by Yoakum and Yerkes are substantiated by later investigations. In an unpublished study of the general intelligence of pupils who completed different grades, made by the Department of Special Education of the Detroit school system, results given in the following table were obtained. The tests used were the Detroit Alpha Intelligence Tests, a modification of the Army Alpha Test. The table presents results obtained in January, 1926, from 2,469 pupils who

¹ Terman, *op. cit.*, pp. 93-94.

² Yoakum and Yerkes, *op. cit.*, p. 23.

then completed the sixth grade, 2,198 who completed the eighth grade in eight-grade elementary schools, 610 who completed the ninth grade in three intermediate or junior high schools, and 1,085 who completed the twelfth grade.

INTELLIGENCE RATINGS OF PUPILS COMPLETING CERTAIN GRADES

Number of cases	Grade completed	Per cent making each score						
		A	B	C+	C	C—	D	E
2,469	6th	11	13	16	23	15	11	11
2,198	8th	16	15	19	23	14	9	4
610	9th	23	22	20	20	9	4	2
1,085	12th	48	31	15	5	1		

It will be noted that of those completing the sixth grade 40 per cent were above the average C; of those completing the eighth grade, 50 per cent; of those completing the ninth grade, 65 per cent; and of those completing the twelfth grade, 94 per cent. While these percentages would probably be different under the changed conditions of 1940, the higher grades would still show decidedly larger percentages of pupils above the score of C than would the lower grades.

Proctor's report upon 131 pupils who entered high school and stayed long enough to make any scholastic record shows that 101 graduated, of whom 65 were very superior, superior, or above average in intelligence as measured by the Stanford Revision of the Binet-Simon individual tests. Of the remainder, 27 were average and 9 below average.¹

It is, then, possible to predict from an individual's intelligence rating about how far he is likely to be able to go with his school and college education. This does not mean that he will go this far. He may lack the necessary "drive" or the financial means or the proper encouragement. It means only that he has the intelligence needed in order to go this far. Nor does it mean that all with lower intelligence will be unable to reach this same level. Some individuals, superior in other respects but relatively low in intelligence, will go farther in their schooling than could be predicted on the basis of their intelligence ratings only. How-

¹ WILLIAM MARTIN PROCTOR, *Educational and Vocational Guidance*, p. 31, Boston: Houghton Mifflin Company, 1925.

ever, it can be said with assurance that in the former case the chances are much more favorable than in the latter for completion of a certain level of educational achievement, such as graduation from high school or college. Since entrance upon many vocations, especially in the professional field, depends upon extensive special preparation and the special preparation can be undertaken only by those who are high school graduates or college graduates, as the case may be, then the individual's intelligence rating is of great significance to the counselor who is helping him to decide upon the vocation for which he should prepare. For example, if his intelligence is only average, his chances of being able to meet the entrance requirements of a medical school are almost negligible, to say nothing of his chances for graduation in medicine and admission to practice of the profession later. Yet it was found in a recent unpublished study of occupational choices in relation to intelligence ratings that 51.5 per cent of intermediate or junior high school boys who aspired to the professions have intelligence ratings of C+ or lower by the Detroit Alpha tests.

Since there is a growing tendency to set up hurdles of general education and to raise them from time to time, not only for admission to preparation for professional occupations but in some cases for admission to lower level occupations, there is growing need that ability to leap such hurdles be considered in giving vocational counsel. If high school graduation should become a requirement for entrance upon apprenticeship in the various skilled trades, then ability to graduate from high school as indicated by intelligence rating must be considered in counseling concerning such work unless high school graduation requirements are modified to meet the situation.

Intelligence requirements for different occupations. Not only are certain limitations placed by one's intelligence upon his chances to prepare for, and in some cases to enter, certain occupations. Much more important for one's vocational success is the fact that vocations differ a great deal with respect to the intelligence possessed, as measured by intelligence tests, by the great majority of those who work with efficiency and satisfaction in them. Physicians as a group rate high in intelligence. Laborers as a group rate low. In fact, there is evidence that occupations can be classified, somewhat roughly to be sure, according to the

median intelligence of those who work at them. It is obvious that in so far as occupations can be thus classified, the intelligence of individuals becomes of importance in guidance work.

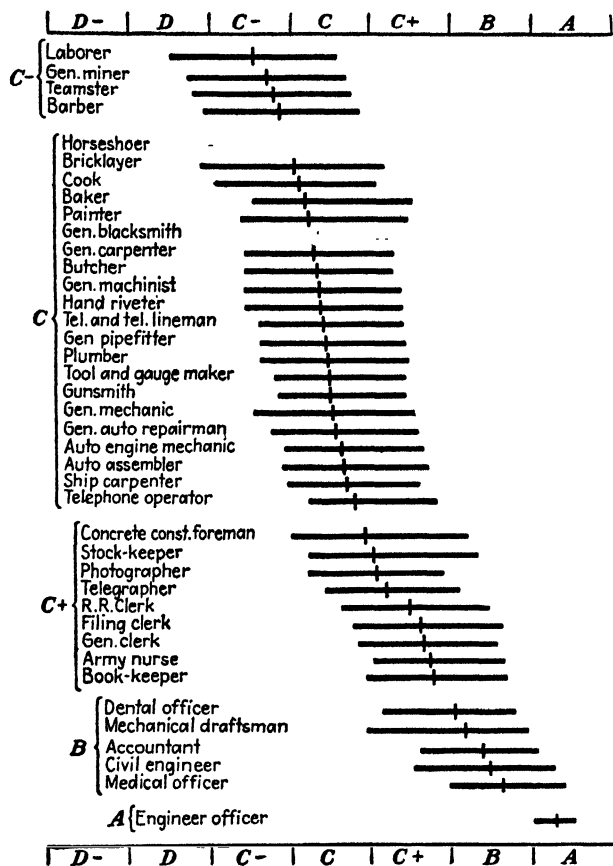


CHART 1.—OCCUPATIONAL INTELLIGENCE STANDARDS.

Based on data for 18,423 men. Data taken from soldiers' classification cards. Length of bars shows range of middle 50 per cent. Vertical crossbar shows position of median. (From *Yoakum and Yerkes, Army Mental Tests*, p. 198, New York: Henry Holt & Company, Inc., 1920.)

Attention must, therefore, be given to the question of intelligence ratings of workers in different occupations.

The chart on this page shows the relation of intelligence to occupation as reported by Yoakum and Yerkes on the basis of a study of 18,423 men in the army during the First World War.

The information concerning the occupations of these men was taken from their classification cards. The authors point out that the data are not comparable with those which would be obtained from civilian groups because of various selectional factors which appear in the army. For instance, many highly skilled workers in certain trades were exempted from military service in order to work on the production of arms and munitions of war. Nevertheless, there is evidence that the relative positions of the large occupational groups would be the same though important changes within the groups would no doubt appear if a similar number of civilians were studied in the same way.

Fryer marks off quite definitely five occupational levels as follows:

- I. Professional occupational level. (Superior intelligence required.)
- II. Technical occupational level. (High average intelligence required.)
- III. Skilled occupational level. (Average intelligence required.)
- IV. Semi-skilled and low-skilled occupational level. (Low average intelligence required.)
- V. Unskilled occupational level. (Inferior intelligence required.)¹

Fryer has gone so far as to make a list of 96 occupations for each of which he gives the intelligence group, the score average, and the score range in terms of the Army Alpha tests. For example, for an accountant the intelligence group is A, the score average is 137, and the score range is 103-155. For a chauffeur the intelligence group is C, the score average is 65, and the score range is 43-91. According to Fryer this means that a man who wishes to be a chauffeur will stand the best chance of "achievement in the occupation" if he ranks in intelligence group C, has an intelligence rating near 65, and is neither below 43 nor above 91.

The Minnesota Occupational Rating Scales developed more recently provide for six categories of *abstract* intelligence, as follows:

- I. High professional and executive occupations: Requiring very superior intelligence with training equivalent to that of a college gradu-

¹ DOUGLAS FRYER, "Occupational Intelligence Standards," *School and Society*, XVI (Sept. 2, 1922), 273-277.

ate from a first-class institution. High standards, with ability for creative and directive work, such as lawyer, college president, president of a large manufacturing concern, etc.

II. Lower professional and large business occupations: Requiring superior intelligence with training *equivalent* to 2 or 3 years of college or to that of executive of moderately large business. Achievements less creative than in group I, but also demanding executive and leadership ability, such as executive of a moderately large business, veterinary doctor, high school teacher, etc.

III. Technical, clerical, supervisory occupations: Requiring high average intelligence with training *equivalent* to high school graduation. Minor executives (foremen, department heads) or highly technical work often involving dealing with abstract classifications and details, such as railroad clerks, some retail dealers, photographers, telegraphers, shop foremen, stenographers, etc.

IV. Skilled tradesmen and low-grade clerical workers: Requiring average intelligence with *equivalent* of some training beyond the eighth grade. Mechanical work demanding specialized skill and knowledge; tasks mostly of a complicated but concrete nature and requiring particular technical training, such as auto mechanic, stationary engineer, file clerk, typist, etc.

V. Semi-skilled occupations: Requiring low average or slightly below average intelligence, with training *equivalent* to seventh or eighth grade. Work demanding a minimum of technical knowledge or skill but a maximum of special abilities, such as dexterity in the performance of repetitive and routine work, such as packer in factories, operatives in factories (operate machines but do not understand principles and are unable to repair or set up the machine), lowest grades of clerical work also, such as number sorters, delivery men.

VI. Unskilled occupations: Requiring inferior intelligence only, with no formal training necessary. Routine manual work under supervision and requiring no skill or technical knowledge, such as day laborers, railroad section hands.¹

It is interesting to note at this point that the Minnesota group who propose these categories of *abstract* intelligence set up also six categories each of mechanical ability, social intelligence, musical talent, and artistic ability. Attention will be given to these later when special aptitudes are considered.

¹ D. G. PATERSON, GWENDOLEN SCHNEIDLER, and J. SPENCER CARLSON, *Minnesota Occupational Rating Scales*, Minneapolis: University of Minnesota, 1936.

Yoakum¹ reports results of an extensive study of "mental alertness" among salesmen, conducted a number of years ago by the Bureau of Personnel Research of the Carnegie Institute of Technology. This study shows striking differences among groups of workers in different parts of the same general field—selling. There were four groups of salesmen considered: *A*, counter salespeople in retail stores; *B*, wholesale salesmen to retail stores; *C*, insurance salesmen; and *D*, salesmen requiring training at a technical college. The average mental alertness score of group *A* was 51; of group *B*, 89; of group *C*, 112; and of group *D*, 139. The chart on page 185 shows the distributions of mental alertness scores for the four groups. While particular attention is attracted to these average scores, the range of scores within the various groups deserves attention, also. The group of insurance salesmen, for example, with an average score in mental alertness of 112, includes men with both lower and higher scores than are shown for any other group. A more extensive study would be necessary in order to determine the significance of this wide range—a study which takes account of the proficiency of the worker in comparison with his mental alertness and also of the different levels of intelligence among the patrons of the insurance salesman. Most insurance salesmen who are successful with unskilled factory workers are not of the type who succeed with professional workers.

Significance of intelligence ratings for vocational counseling. While much more study of this problem is needed, enough evidence has accumulated during the past 20 years to make a convincing case for the value of intelligence scores or ratings in aiding young people to make the transfer from school to occupational life, assuming, of course, that these ratings have been obtained with proper care.

It is obvious that one individual may choose an occupation in which the great majority of workers have a higher degree of intelligence than he possesses, while it is quite as possible for another to choose an occupation in which the great majority of workers have a markedly lower intelligence rating than his. Entry into the occupation in either case is likely to prove unfor-

¹ C. S. YOAKUM, "Basic Experiments for Scientific Selection," *Carnegie Institute of Technology, Service Bulletin of the Bureau of Personnel Research*, IV (January, 1922), 12.

tunate, though in the former case, especially if the occupation chosen lies in the professional field, the many educational hurdles to be encountered make actual entry improbable. Generally, however, it is far better to avoid the waste of time and energy and the bad psychological effects of repeated failures to leap the hurdles. If such an individual actually succeeds in entering the occupation, he gives himself an enormous handicap in his efforts

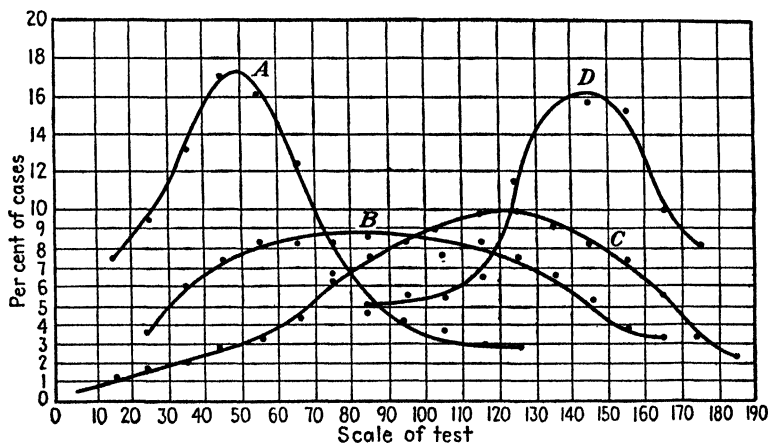


CHART 2.—“MENTAL ALERTNESS” AMONG SALESMEN.

Types of Salespeople

A. Counter salespeople.

B. Wholesale salesmen to local retail stores.

C. Insurance salesmen.

D. Salesmen requiring training at a technical college.

[From Yoakum, “Basic Experiments for Scientific Selection,” *Carnegie Institute of Technology, Service Bulletin of the Bureau of Personnel Research*, IV (January, 1922), 12.]

for success in that he has placed himself in competition with a group of men and women whose intelligence is greater than his own.

On the other hand, the one who enters an occupation which is definitely below his level of intelligence will usually find that neither the work nor the associations bring him satisfaction. He either seeks another occupation or becomes a routine worker who finds satisfaction outside his work rather than in it. Scott and Clothier¹ showed quite conclusively that, under certain

¹ W. D. SCOTT, R. C. CLOTHIER, and S. B. MATHEWSON, *Personnel Management*, 2d ed., pp. 463-466, New York: McGraw-Hill Book Company, Inc., 1931.

circumstances, labor turnover depends very directly upon the relation of mental alertness of the worker to the work done. In one company, for example, they found a good degree of stability among clerical workers whose mental alertness rating as measured by a certain test was between 35 and 50, while there was high turnover among those whose rating was decidedly below 35 or decidedly above 50. Those in the low group appeared to be unable to meet the requirements of the work. In this particular case lack of a suitable promotional policy made it impossible to hold many of those whose intelligence ratings were comparatively high.

The same authors report, concerning another establishment, that in the tool department where the work is high grade and varied, 83 per cent of the men who were retarded five years in school progress (amount of retardation being taken as a measure of mental alertness since results of intelligence tests were not available) desired change of work. On the other hand, in the inspection department, where the work is largely "foolproof," repetitive, and monotonous, the amount of dissatisfaction was very low among those who were very retarded in school, while 90 per cent of those whose progress in school was normal expressed a wish for some other kind of work.

It would be highly desirable, to be sure, to have more complete evidence than is yet available as to the intelligence requirements of different occupations. Indeed, Terman predicted many years ago that ultimately research will determine the minimum intelligence quotient necessary for success in each leading occupation. This much desired goal is still far from realization, though there has been progress in that direction. However, there is already, as we have seen, sufficient evidence of this general character to make it necessary for the vocational counselor to ascertain the pupil's intelligence rating and take it into account when considering his fitness or unfitness for any specific occupation.

Limitations on the use of intelligence ratings. While intelligence ratings are helpful in determining whether an individual has the ability to leap the educational hurdles that bar the way to entrance upon certain vocations, and while they serve also to help him avoid placing himself under an excessive handicap of competition with more capable people, the limitations of these ratings for vocational guidance purposes should not be over-

looked. Intelligence ratings are useful in the selection of an occupational level rather than of a particular occupation.

To be sure, if an individual is considering a particular occupation, his intelligence rating is of assistance in reaching a decision for or against it. But this is because of the general level of ability or preparation it requires rather than because of its peculiar characteristics. If he has no particular occupation in mind, the rating helps him to reduce the range of occupations among which to continue his search. By means of his intelligence rating he is assisted in deciding in favor of or against the professional field or the skilled trade field but not in deciding between law and medicine or between the machinist's and the plumber's trades. There are a great number of other occupations on each of these levels.

Again, it must be kept in mind that in any one group of occupations, and in any particular occupation within that group, the workers differ a great deal in their intelligence ratings, as is seen by examining the charts on pages 181 and 185. For example, the middle 50 per cent of the plumbers included in Chart 1 on page 181 vary from a low average rating of C- to a high average rating of C+ by the Army Alpha Test, with part of the plumbers rating lower than C- and part higher than C+. Still more striking is the wide range of intelligence ratings of salesmen, especially insurance salesmen, already referred to as shown in Chart 2, on page 185. From the evidence available there can be no doubt that, important as it is, intelligence is only one factor to be considered in the problem of vocational selection. An individual may possess one or more of the other factors to such a degree as to compensate for a slight, or in some cases, a considerable shortage of intelligence as measured by the standard tests.

SUMMARY

Six kinds of data concerning each pupil are needed for use in a school program of vocational guidance: general data, physical data, psychological data, social environment data, achievement data, and data concerning the individual's educational and vocational plans. However, only such data should be gathered as will actually be used.

The general data are mainly for use in locating the pupil when needed. Included are name, address, telephone number, name

of parent, name of home-room teacher, and pupil's school program for the current semester. The physical data required cover such items as race, sex, age, health record, physical handicaps if any, height and weight in relation to physical maturity. These data must be brought up to date from time to time as the pupil advances through the secondary school period. The needed psychological data include information concerning the individual's intelligence, his special aptitudes, and his personality traits. This chapter is concerned principally with data pertaining to intelligence.

In this discussion the term "intelligence" is defined as "capacity of the individual to adjust himself to new situations, to solve new problems, to learn." It is accepted that an individual's intelligence is chiefly a matter of inheritance and that its modifiability is limited rather narrowly.

School attainment is a rough but far from satisfactory measure of intelligence. In order to provide a more accurate measure, individual and group intelligence tests were developed, beginning with the Binet-Simon individual tests in France and the Stanford Revision of these in America. Results of intelligence tests often are expressed in terms of "intelligence quotient" (I.Q.), a person being rated above normal (or average) in intelligence when his I.Q. is above 100. Notwithstanding much popular skepticism concerning the reliability of such tests, a well-chosen intelligence test properly given and carefully scored affords a better measure of intelligence as defined above than school records or anything else yet devised. People generally are distributed with reference to intelligence, as measured by the tests, according to the normal curve of distribution.

Since it has been shown that intelligence is a very important success factor in high school, college, and university work, an individual's I.Q. is a significant item in predicting how far he is likely to be able to go with his education. And since entrance into many vocations depends upon high school graduation or college graduation followed by special preparation, the I.Q. is an item of significance for vocational choice. Ability to leap the educational hurdles which bar entrance into occupations must be taken into account in vocational counseling.

It has been shown, also, that vocations differ decidedly in respect to the I.Q.'s of the great majority of those who work with

efficiency and satisfaction in them. An individual may be too intelligent to find satisfaction in the monotonous routine of one type of occupation and not intelligent enough to meet successfully the requirements of another. Since occupations have been classified, even though somewhat roughly, with reference to the degree of intelligence which they require, here again the I.Q. is an important item in counseling. However, it is an aid in determining the *occupational level* for which one is suited rather than in selecting a particular occupation. The problem of selecting a particular occupation at that level still remains.

The I.Q. is an important item of information needed in vocational counseling but only one of several such items.

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CHAPTER XI

THE PERSONAL DATA COLLECTING SERVICE: SPECIAL APTITUDES AND INTERESTS

SPECIAL APTITUDE TESTS

The significance of aptitudes. One of the factors other than intelligence which claims attention in the list of psychological data needed for vocational guidance purposes is the special aptitudes possessed by an individual which make him better suited to one occupation or type of occupation than another. It is well known that two people of approximately the same general ability often differ a great deal in the ease with which they can learn music or the readiness with which they "take to" music. It is often said that one has an aptitude for music while the other has not. Similarly it is often said of a person that he has an aptitude for art, or dramatics, or carpentry, or engineering, or sales work, or some other occupation. It is clear that there is something which, if discoverable and measurable in advance of vocational choice and preparation, should prove of great value in vocational counseling. If it is possible to obtain them, data concerning an individual's aptitudes should make it possible to narrow more closely the range of occupational choice within that group or level of occupations indicated by his intelligence rating as desirable for him.

The nature of special aptitudes. As defined by Warren in his *Dictionary of Psychology*, aptitude is "a condition or set of characteristics regarded as symptomatic of an individual's ability to acquire with training some (usually specified) knowledge, skill, or set of responses such as the ability to speak a language, to produce music, etc." Bingham, after quoting Warren, adds:

In referring to a person's aptitude for mathematics or art, or carpentry, or law, we are looking to the future. His aptitude is, however, a present condition, a pattern of traits, deemed to be indicative of his potentialities.¹

¹ W. V. BINGHAM, *Aptitudes and Aptitude Testing*, pp. 16-17, New York: Harper & Brothers, 1937.

Bingham then proceeds to make it clear that he is not thinking of aptitude as limited to native endowments only.

We want the facts about a person's aptitudes *as they are at present*: characteristics now indicative of his future potentialities. Whether he was born that way, or acquired certain enduring dispositions in his earliest infancy, or matured under circumstances which have radically altered his original capacities is, to be sure, a question not only of great theoretical interest but of profound importance to society at large; for the answer has a bearing on public policy in regard to universal education, the functions of the school, and eugenic legislation. But it is of little practical moment to the individual himself at a time when he has already reached the stage of educational and occupational planning. His potentialities at that period of his development are quite certainly the products of interaction between conditions both innate and environmental. His capacity for gaining manual skills, his intelligence, his emotional make-up, his moral character, indeed all the aspects of his personality, are in varying degrees subject to limitations that have been imposed by opportunities for growth and exercise, as well as by his original nature. No matter what his constitution may at first have been, it has unfolded, taken shape, been encouraged here and thwarted there, during the impact of favorable or unfavorable stimulation from the environments in which he has developed. And so, when appraising his aptitude, whether for leadership, for selling, for research, or for artistic design, we must take him as he is—not as he might have been.¹

Bingham insists further that one's readiness to acquire proficiency in an occupation is not the sole measure of his aptitude for it. Readiness to develop an interest in exercising his potential ability along this line is involved, also, and "‘ability to acquire’ a genuine absorption in the work, as well as a satisfactory level of competence."² Here certain personality traits seem to come into the picture as Bingham sees it, for it is not uncommon for an individual to manifest musical ability, for example, who lacks the personal qualities essential to its development.

It appears, too, that Bingham's conception of aptitude is broad enough to include intelligence, for he says in discussing preparation for the professions: "Minimum levels of intelligence as measured by the more reliable examinations are without ques-

¹ *Ibid.*, pp. 16–17.

² *Ibid.*, p. 18.

tion factors in aptitude for successful mastery of what these [professional] schools teach."¹

For the purposes of this book Bingham's conception of aptitudes is too broad. The whole question of psychological suitability for an occupation seems to be implied when he speaks of aptitude for it. It has seemed better to the writer to break up this question of suitability into intelligence, special aptitudes, and personality traits, and then to consider each of these separately in relation to vocational choice. However, this is done with full recognition of the impossibility of separating the three in any given situation. All must be considered together in actual counseling, for instance. Their separation in discussion seems more likely to result in clear understanding and to assure proper consideration of all three in dealing with the subject of needed psychological data. This should become more evident in the chapter on Counseling.

If Warren's definition as discussed by Bingham is accepted, with the single reservation just noted, it will be seen that a special aptitude has substantially the same relationship to a particular line of activity that intelligence has to life as a whole. We are concerned with "capacity of the individual to adjust himself to new situations, to solve new problems, to learn" in both cases. The area covered by this concern is what differs.

It should be noted, also, that what matters in case of special aptitudes, just as in case of intelligence, is *present* capacity rather than native capacity. To be sure, the former capacity includes the latter and the effects of environment upon it. Also, the former is determined to a large extent by the latter. But, since no method has yet been found of separating the latter from the former, only the former is available for study and measurement, however desirable it might be to have this otherwise. Of course, native special capacity can be inferred from present special capacity, especially if proper attention is given to environmental influences that may have contributed to the development of the special capacity concerned.

Tests of special aptitudes. A few illustrations relating to widely different types of occupations will help to make clear the nature of special aptitude tests.

¹ *Ibid.*, p. 57.

Tests for shell inspectors. Link gave a series of tests to 73 girls employed in a munitions plant. Fifty-two of the girls were inspectors and 21 were gaugers. He then found the correlations between the scores made by the girls who were inspectors and the average number of pounds of shells inspected per hour over a period of four weeks. Also he found similar correlations for the gaugers. The following results were obtained:

CORRELATIONS BETWEEN TEST SCORES AND PROFICIENCY IN THE WORK OF INSPECTOR AND GAUGER*

Tests	Correlations	
	Inspectors	Gaugers
Card sorting.....	.55	.05
Tapping.....	.14	.52
Cancellation.....	.63	.17
General intelligence.....	.14	.18
Number-group checking.....	.72	-.19

* H. C. LINK, *Employment Psychology*, p. 33, New York: The Macmillan Company, 1919.

From this experiment Link concluded that high scores made by an individual in the card-sorting, cancellation, and number-group checking tests indicated probable success as an inspector, while only the tapping test had any significance in the selection of gaugers.

In summarizing all his experiments in this field, which involved giving the tests that he found significant to more than 2,900 applicants for the work of inspection and to a considerable number already engaged in this work, Link says:

It was found (1) that the verdict of the foreman tended to bear out that of the tests; (2) that of a certain group studied intensively, 94 per cent of the successful workers were above the standard in the tests, and all failures were failures also in the tests; (3) that those who passed the tests worked (that is, were continuously employed as inspectors) almost ten times as long as those who did not.¹

It should be noted that shell inspection is highly specialized, repetitive work, which requires ability to observe defects quickly,

¹ LINK, *op. cit.*, p. 52.

and to throw out deftly the defective shells. One who is suited to the work can become quite proficient in a few days.

Tests of musical talent. Tests to determine a very different kind of aptitude, or the lack of it, were developed by Seashore,¹ and recently revised by him and associates. As long ago as 1916 this well-known psychologist, after many years of experiment and study, established a clinic at the University of Iowa for testing musical capacity. Describing this undertaking, he says:

It is now possible to make reliable and fairly complete measurements of the fundamental capacities which constitute musical talent early enough to serve as a guide in the selection of a musical career. The measurement of musical talent is not one measurement but a large number of measurements which must be built up into a system so as to represent fairly the most salient features of musical talent. It is necessary, for example, to know the sensitiveness of the ear to tones, the musical imagination, the musical memory, the musical intellect, the musical feeling, the time-sense, the sense of rhythm, and the sense of harmony and melody, which are capacities involved in the hearing and appreciation of music. Likewise it is necessary to know the corresponding facts about the ability to express music in singing and playing. Different instruments require different kinds of talent. . . .

In brief, the examiner should be able to state on the basis of scientifically observed facts, what kind of musical training and achievement, if any, the pupil is adapted for and what is the probable extent of achievement and rate of progress.²

In a book³ published some years later, Seashore presents the following list of factors of the musical mind:

I. Musical sensitivity.

A. Simple forms of impression.

1. Sense of pitch.
2. Sense of intensity.
3. Sense of time.
4. Sense of extensity.

B. Complex forms of appreciation.

1. Sense of rhythm.

¹ JOSEPH G. SAETVEIT, DON LEWIS, and CARL E. SEASHORE, *The Revision of the Seashore Measures of Musical Talents*, Series on Aims and Progress of Research, No. 65, Iowa City: University of Iowa Press, 1939.

² CARL E. SEASHORE, *Vocational Guidance in Music*, University of Iowa Monographs, First Series, No. 2, Iowa City: University of Iowa Press, 1916.

³ CARL E. SEASHORE, *The Psychology of Musical Talent*, New York: Silver, Burdett & Company, 1920.

2. Sense of timbre.
 3. Sense of consonance.
 4. Sense of volume.
- II. Musical action.
- Natural capacity for skill in accurate and musically expressive production of tones (vocal, instrumental, or both) in:
1. Control of pitch.
 2. Control of intensity.
 3. Control of time.
 4. Control of rhythm.
 5. Control of timbre.
 6. Control of volume.
- III. Musical memory.
1. Auditory imagery.
 2. Motor imagery.
 3. Creative imagination.
 4. Memory span.
 5. Learning power.
- IV. Musical intellect.
1. Musical free association.
 2. Musical power of reflection.
 3. General intelligence.
- V. Musical feeling.
1. Musical taste.
 2. Emotional reaction to music.
 3. Emotional self-expression in music.

Considering for the moment a single factor in this list, Seashore found that one individual may be 200 times as keen as another in pitch discrimination. He concludes that, other things being equal, the best 10 per cent in pitch should be stimulated enthusiastically to develop their musical talent; the next 20 per cent should be encouraged freely; the next 40 per cent should be encouraged; the next 20 per cent should be questioned; and the last 10 per cent should be discouraged. Of course, Seashore is thinking here not only in terms of a musical career but also in terms of musical appreciation and amateur performance.

Seashore cites the case of one girl who had had considerable musical training and achieved local success as a singer who made a high score in his tests, taken as a whole. This girl was greatly encouraged and stimulated in her efforts toward a musical career by the showing she made in the tests. Another girl of poor family who had had no training made an exceptionally high score in the tests, and was given training opportunities as a

result. A young man upon whose musical "education" considerable money and effort had been expended with insignificant results was found to be hopelessly deficient in several of the most important factors covered by the tests. The accompanying

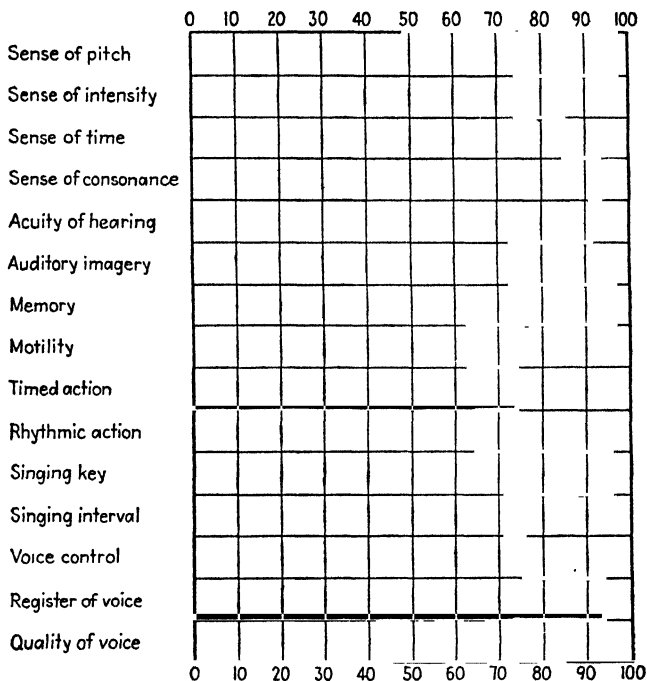


CHART 3.—MUSICAL TALENT OF "MR. WHITE."

(From Carl E. Seashore, *The Psychology of Musical Talent*, p. 23, New York: Silver, Burdett & Company, 1920.)

charts show the scores made by two men whom Seashore calls "Mr. White" and "Mr. Black."

Of Mr. White, Seashore says:

In general Mr. White has an unusually strong and well-balanced musical mind, ranking in this respect among the best three per cent in a normal community. He has always manifested great interest and activity in music, but has had only a small amount of formal training. He lives in a tonal world and is emotionally responsive to music.¹

Concerning Mr. Black the following comment is made:

So far as musical resources are concerned, his record is remarkable for its uniform inferiority. He has taken music lessons but has met

¹ *Ibid.*, p. 23.

with failure. He shows only a perfunctory interest in music. This record removes all necessity for uncertainty and pretense.¹

Tests of mechanical aptitude. Much attention has been given to tests of mechanical aptitude which, of course, are designed to measure aptitude for a fairly large field of occupations rather

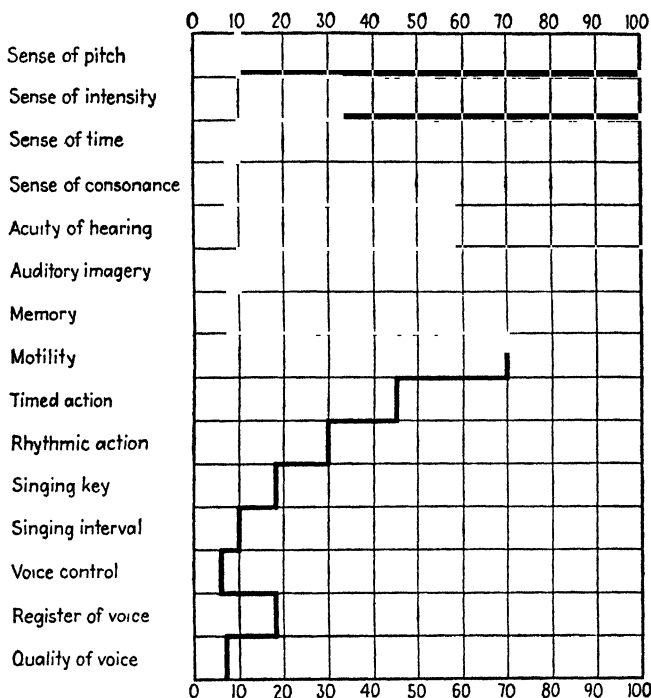


CHART 4.—MUSICAL TALENT OF "MR. BLACK."

(From Carl E. Seashore, *The Psychology of Musical Talent*, p. 25, New York: Silver, Burdett & Company, 1920.)

than for a single occupation. One of the earliest of these, developed by Stenquist, involved assembling of parts into mechanical devices, beginning with a simple one and advancing as far as the fixed time would permit through a series of devices each more complicated than its predecessor. Stenquist later brought out his more widely used paper-and-pencil tests. Essential features of these tests are identification of pictures of tools and parts of mechanical contrivances and answering questions about pictures and diagrams of machines and machine

¹ *Ibid.*, p. 25.

parts. Stenquist reports a median coefficient of correlation of .67 between scores made on his tests and shop teachers' ratings of "general mechanical aptitude."¹

O'Rourke's Mechanical Aptitude Tests, also of the paper-and-pencil type, were used by the Tennessee Valley Authority in selecting laborers who were to be given opportunity to learn various skilled trades. In other experiments with these tests it was found that nearly all candidates for engineering training scored B or better while mature T.V.A. workers averaged about D+. These tests, like those of Stenquist, are based on the assumption that one who possesses mechanical aptitude picks up more information concerning machines and mechanical things than does one who lacks this aptitude. Hence a measure of one's mechanical information is also a measure of his mechanical aptitude.

The Minnesota Mechanical Assembly Test² constitutes the most ambitious effort to measure mechanical aptitude. The subject is asked to assemble the disassembled parts of each of nine mechanical objects (box A) with a time allowance on each object. If an object is not assembled when the time allowance is up he passes to the next object. The total time limit for the nine objects is 18 minutes. Next he is asked to assemble the parts of each of eight objects in another group (box B) with a total time limit of 21 minutes 5 seconds. Then he is asked to assemble 16 objects of another group (box C), with a total time limit of 16 minutes. A push-button doorbell and a bicycle bell are among the objects in box A; a monkey wrench and an inside caliper, among those of box B; and pliers and a metal pencil, among those of box C.

The vocational significance of a score made on this test is suggested by the average standard scores of three groups of workers as follows: machinists, 5.85; industrial arts teachers, 5.49; machine operators (lathe, drill press, etc.), 4.98. Among a sample of men from the general working population, 80 per cent did not exceed the average score made by industrial arts teachers

¹ J. L. STENQUIST, *Measurements of Mechanical Ability*, Teachers College Contributions to Education, No. 130, New York: Teachers College, Columbia University, 1923.

² D. G. PATERSON and others, *Minnesota Mechanical Ability Tests*, Minneapolis: University of Minnesota Press, 1930.

and 49 per cent did not exceed the average score of machine operators. Also, it was found that 70 per cent of garage mechanics made a better score on this test than the average office clerk. On the other hand, only 11 per cent of the garage mechanics rated as high in verbal intelligence as the average office clerk. No doubt, differences in education and experience as well as differences in native capacity influence results in case of both of these tests when taken by adults.

Commenting on the vocational significance of these tests, Bingham says:

A person's verbal intelligence seems to have little relation to his performance in mechanical assembly tests. Brightness in abstract school subjects does not imply mechanical aptitudes; neither does dullness. In the distribution of human endowments, the so-called law of compensation has not been found to hold. To make trade schools the dumping-ground for students whose only qualification for entrance is their inability to learn from books is nothing short of scandalous. The youths' mechanical aptitudes should first be ascertained, by reference to their achievements in pre-vocational tryout courses and their test records. Assembly tests have proved useful in such situations, as parts of a battery for ascertaining unsuspected mechanical talents and for estimating the probabilities of mastering vocational courses in which some aptness for handling mechanical contrivances is needed.

A person's score may be thought of as determined in part by his endowment of mechanical ingenuity, in part by his familiarity with mechanical devices more or less similar to these in principle. His score, then, cannot be taken as a pure measure of his mechanical intelligence, but must be appraised in the light of what is known about his previous background and opportunity for knowing about and manipulating a large variety of mechanisms. This precaution is particularly to be observed when interpreting the significance of an adult's score.¹

Bingham also points out that it is necessary to consider the size of the standard error of measurement and that this varies more in case of adults than in case of boys. He concludes that unless a person's performance in an assembly test of this sort is much below average and is also accompanied by other indications of lack of mechanical ability or interest, it need not discourage him from entering a mechanical occupation.

¹ BINGHAM, *op. cit.*, p. 308.

Another test of mechanical aptitude is Johnson O'Connor's Wiggly Blocks,¹ used by him to measure ability to visualize three-dimensional structure. He claims a high degree of success by means of this test in selecting youth who should prepare for such occupations as those of engineer, architect, draftsman, and high-grade machinist. O'Connor also uses a finger-dexterity test and a tweezer-dexterity test to discover aptitude for certain types of small assembly work.

Other tests in this field include the McQuarrie Test for Mechanical Ability and the Detroit Mechanical Aptitudes Examination, with separate forms for boys and girls.

Tests of clerical aptitude. In the field of clerical work numerous efforts have been made to devise aptitude tests, both for the field as a whole and for parts of it. A rather comprehensive effort to measure aptitude for typing was made by Muscio and Sowton² in London more than 15 years ago. They gave a series of tests to 220 subjects in several groups, all of whom possessed more or less experience in typewriting. Correlations were then found between the rank of the subjects in the tests and their rank in proficiency in the groups to which they belonged. These investigators concluded that the following tests which they used showed sufficiently high correlations to be of some significance in discovering aptitude for typewriting:

1. A test of immediate memory span. (Reproducing sentences immediately after they are read.)
2. A test in carrying out directions.
3. A finding test. (Finding products of pairs of two-place numbers from a table.)
4. A completion test, in which appropriate words must be supplied to fill in blank spaces in a sentence.
5. A test of spelling.

They considered it probable, also, that a test of speed of association would be valuable.

Minnesota Test for Clerical Workers. A test of more general aptitude in this field is the Minnesota Vocational Test for

¹ JOHNSON O'CONNOR, *Psychometrics*, Cambridge: Harvard University Press, 1934.

² B. MUSCIO and S. C. M. SOWTON, "Vocational Tests and Typewriting," *The British Journal of Psychology*, XIII (April, 1923), 343-369.

Clerical Workers.¹ The subject checks pairs of numbers and pairs of names, the members of each pair being exactly alike in some cases and differing very slightly in other cases. Only those pairs that are *exactly alike* are to be checked. A time limit of 15 minutes and 28 minutes is fixed for the shorter and longer forms respectively of this test, slightly more time being allowed for the number checking than for the name checking. Accuracy and speed are thus the two qualities that are measured.

Accountants and bookkeepers make better scores on this test than any other group of clerical workers. On the average their scores are better than 95 per cent of subjects selected at random from the general working population. The average scores of accountants are somewhat better than those of stenographers, and the latter considerably better than those of office-machine operators. It is interesting to note that while the two latter groups averaged approximately the same on number checking, stenographers averaged decidedly better than office-machine operators on word checking. The authors report an important relationship between scores made on the test by school pupils and their later success in a commercial high school.

Johnson O'Connor applies the name "accounting aptitude" to the qualities measured by a test devised by himself which is similar to the Minnesota Vocational Test for Clerical Workers. He points out, however, that business executives, also, and others in office positions average well in this test.

Tests of aptitude for other occupational fields. Little more than mention can be made here of other aptitude tests.

The McAdory Art Test² includes 72 plates, each of which pictures a single subject in four different ways, *A*, *B*, *C*, and *D*. An individual's score on the test is determined by the closeness of his judgment on the relative artistic merits of *A*, *B*, *C*, and *D* to the predetermined combined judgment of a group of carefully selected art experts.

¹ DOROTHY M. ANDREW and DONALD G. PATERSON, *Measured Characteristics of Clerical Workers*, University of Minnesota Employment Stabilization Research Institute Studies, Vol. III, No. 1, Minneapolis: University of Minnesota Press, 1934.

² MARGARET MCADORY, *The Construction and Validation of an Art Test*, Teachers College Contributions to Education, No. 383, New York: Teachers College, Columbia University, 1929.

The Art Judgment Test,¹ devised by Meier and Seashore, consists of 125 pairs of pictures, one of each pair being a reproduction of the work of a famous artist and the other of the pair being an inferior copy of the same picture. The person taking the test is asked to select from each pair the one that is the "more pleasing, more artistic, more satisfying."

Varnum's Selective Art Aptitude Test² is divided into seven parts, grouped according to related aptitudes, which in turn are related to groups of art professions or industries requiring ability contained in that specified group. Group A consists of three purely objective tests designed to fit the requirements of certain industrial and art processes:

Test 1. Acuity of vision (form observation)—4 parts.

Test 2. Color memory—2 parts.

Test 3. Tone gradations—2 parts.

Groups B and C are concerned with "measuring the feeling-tone, the subjective, and emotional side of the field of art."³ Ability shown in group B "opens up additional opportunities and broader goals than would be the case of proficiency in group A," while group C "measures those elements of creative activity of outstanding value to industrial and other divisions of art."⁴ Each of these groups contains two tests:

Group B	{	Test 4. Proportioning—1 part.
		Test 5. Balance and rhythm—4 parts.
Group C	{	Test 6. Speed (motor reactions under creative stimulus)— 2 parts.
		Test 7. Creative imagination—2 parts.

The Stanford Scientific Aptitude Test and the Coxe-Orleans Prognosis Test of Teaching Ability, which Bingham lists among intelligence tests, deserve careful examination by those who are interested in measuring aptitudes for these professional fields.

¹ N. C. MEIER, *Aesthetic Judgment as a Measure of Art Talent*, University of Iowa Studies, 1st series, No. 114, Iowa City: University of Iowa, 1926.

² WILLIAM H. VARNUM, *Selective Art Aptitude Test*, Scranton, Pa.: International Textbook Company, 1940.

³ WILLIAM H. VARNUM, *Validation, Reliability, and Rating Manual for a Selective Art Aptitude Test*, p. 2, Scranton, Pa.: International Textbook Company, 1940.

⁴ *Ibid.*, p. 3.

Tests of this type of varying merit have been devised for aviators, dressmakers, hairdressers, journalists, policemen, printers, railway workers, salesmen, streetcar motormen, telegraph operators, telephone operators, and for workers in other occupations.

Methods used in devising aptitude tests. A method of devising aptitude tests which has met with some success is the empiric method. The investigator takes a group of tests of any sort that he thinks might be useful, gives them to a considerable number of workers of known ability in the occupation under investigation and then determines which tests show a high correlation with occupational proficiency. Tests showing a high correlation are considered suitable for selection of new workers. Link used this method in selecting shell inspectors.

The method of devising special aptitude tests which seems likely to make the largest contribution to vocational guidance is that which involves a careful analysis of the occupation into its elements. It is then determined what psychological qualities are important in connection with each element, and individuals are tested for these qualities. This is substantially the plan followed by Seashore. It is, of course, necessary to determine the validity of the test by giving it to a considerable number of people who are already engaged in the occupation and whose efficiency has been reliably rated. Only in case there is a high correlation, with small probable error, between performance in the test and performance in the occupation can one conclude that the test is valid.

An interesting illustration of this method is found in the tests for dressmakers' apprentices used by Miss Spielman¹ in London. As a result of careful analysis she came to the conclusion that the psychological factors determining efficiency in dressmaking are: (1) speed of work—maximum speed, customary speed, ratio of maximum speed to customary speed, and resistance to distraction; (2) quality of work—accuracy, perception of equal distances, memory of length, form, and color, coordination of hand and eye and hand and image, and lightness of touch; and (3) independence of forewomen's supervision—memory for complicated instructions, and observation. The tests for maximum speed included drawing circles at maximum speed, threading beads at maximum

¹ WINIFRED SPIELMAN, "Vocational Tests for Dressmakers' Apprentices," *The Journal of the National Institute of Industrial Psychology*, I (July, 1923).

speed, pricking with a mounted needle at maximum speed, and knotting wool at maximum speed. It will be observed that the processes involved in dressmaking were avoided in these tests. The same was true of the tests used for customary speed, for perception of equal distances, for memory of length, form, and color, and for the other qualities listed above. A correlation of .78 was found between the results of the tests and the ranking made by the trademistress of the girls who took the tests.

Looking at the matter from another angle, it obviously would be a great advantage if, on the one hand, each pupil could be tested for and rated in the entire range of important psychological qualities and, on the other hand, each occupation could be analyzed into its elements and the psychological quality most important for each element determined. This would make available at any time a psychograph of each individual pupil for comparison with, if the term may be permitted, the psychograph of any particular occupation in which he may become interested. However, the Swiss psychologist, Claparède, holds that

Psychological analysis of the subject and determination of his separate mental functions may or may not give an accurate estimate of his aptitude for an occupation. The accuracy of the estimate is a new question which can only be settled by experience. The great majority of occupational operations require the coordination of these elementary functions. The possession of these abilities and the power to coordinate them are two different things.¹

Present status of aptitude tests in guidance work. Much to be desired as suitable tests of special aptitudes are, it must be admitted that we are still far from the time when the vocational bureau of a city school system can make extensive use of tests of this type for guidance purposes. The number of occupations for which such tests have been developed is extremely small in comparison with the number of occupations listed by the United States Census. Few of the tests that have been developed have, as yet, proved their value. Preparing and validating tests of this character is an undertaking of such magnitude that further progress along this line must of necessity be slow. And even after a large body of suitable tests is developed there remains the

¹ EDOUARD CLAPARÈDE, *Problems and Methods of Vocational Guidance*, p. 51, Geneva: International Labour Office, 1922.

task of providing sufficient laboratory facilities and psychological staff to give the tests to large numbers of pupils.

It must be recognized that, up to the present time, tests of special aptitudes have proved more useful in selecting workers for particular jobs than in aiding individuals to choose their occupations.

Nevertheless, directors of vocational guidance and their assistants should keep themselves informed as to developments in this field, encourage and participate in experimental work, and be ready to introduce such tests of special aptitudes, as, from time to time, may prove their worth and be found practicable to administer in a school system.

VOCATIONAL INTEREST INVENTORIES

Closely related to aptitude testing are the efforts that have been made to determine the interests of individuals which are significant for vocational choice. True, psychologists tell us that one may have an aptitude for a particular occupation without showing interest in it (possibly because he knows little about it) and that, on the other hand, one may be interested in an occupation for which he shows no particular aptitude. But the problem here is not that of measuring an individual's expressed interest in a particular occupation. It is rather that of discovering the degree to which he possesses the general *pattern of interests that characterize successful workers* in a specific occupation. Strong and others who have been stressing vocational interest inventories base their work upon the fact that "Men engaged in a particular occupation have been found to have a characteristic pattern of likes and dislikes, which distinguish them from men following other professions." The conclusion follows logically that one who possesses to a high degree the interests that characterize physicians as a group and possesses to a low degree the interests that characterize engineers as a group should give weight to this fact in making his vocational plans.

The Strong Vocational Interest Blank.¹ The most important contribution in this field thus far is that of Strong of Stanford University. He has developed five forms of his well-known Vocational Interest Blank, one for males and one for females out

¹ E. K. STRONG, JR., *Manual for Vocational Interest Blank for Men*, p. 1. Stanford University, Calif.: Stanford University Press, 1938.

of school; one for male and one for female students; and one for men whether attending school or not, to be used with recently revised scales. Norms for the interest patterns of workers in 35 occupations, mostly on the professional level, were determined by having thousands of successful adults engaged in these occupations check the last blank mentioned, which contains 400 separate items. In checking the blank one indicates that he likes, dislikes, or is indifferent to each of 100 occupations, 49 recreations and amusements, 36 school subjects, 48 "activities," and 47 peculiarities of people. In addition he expresses himself concerning preferred activities, important factors affecting his work, the men he admires most, the position he would prefer to hold in a club or society, and rates himself on his present abilities and characteristics.

The rating of an individual who fills out the blank is determined by comparing his checked blank with the norms for each of the occupations for which norms have been established. It is thus possible to say that a student's interest pattern scores A or C in respect to architecture, engineering, farming, medicine, teaching, etc. However, it is usually desirable to consider his score with reference to all the occupations on Strong's list, in order to obtain a more complete picture of his interest pattern. The value of the blank decreases rapidly for ages below seventeen years and appears to have little value below fifteen years.

The question of the stability of one's interests naturally arises. May not an individual check the blank differently five years, one year, or even a few months after he checks it the first time? Strong recognizes that this is true but points out that his researches show a striking similarity between the different checkings by the same individual as far as the really significant items are concerned. Most of the differences are found among the reactions of the individual to items which were relatively unimportant in determining his interest pattern the first time he checked the blank. Strong's studies¹ show a correlation between test and retest scores of .75 for 223 men representing 21 occupations who checked the blanks a second time after an interval of five years.

¹ E. K. STRONG, JR., *Change of Interests with Age*, Stanford University, Calif.: Stanford University Press, 1931.

Hepner's Vocational Interest Quotient.¹ By means of separate check lists for four large fields of work, Hepner undertakes to determine what he calls the vocational interest quotient. The four fields are the professions (24), business occupations (24), skilled trades (20), occupations for women (24). An individual may take the test for one or more fields as he prefers. Hepner's list of items for checking on each of the four lists numbers 167 and, as in case of Strong's blank, the person taking the test is asked to indicate whether he likes, dislikes, or is indifferent to each item.

Commenting on Hepner's "Herculean task," Bingham says:

Because of the inclusion of many general non-diagnostic items among the 167 on the blank, and the small numbers in the occupational groups used in preparing the scales, the resulting V.I.Q.'s do not differentiate well between occupational groups, and their use in guidance cannot be recommended.²

Cleeton's Vocational Interest Inventory.³ This inventory has separate forms for men and women. Its author considers it suitable for high school pupils from the ninth grade up, for college students, and for youth who have left school.

While this inventory follows the same general principles as those of the blanks already described, it does not provide for recording reactions of indifference to listed items, and its arrangement is different. The form for men includes a total of 630 items to be checked and 40 questions to be answered yes or no. The same is true of the form for women. The items to be checked are in nine groups. A high score on any group is supposed to indicate possession of interests which are characteristic of workers in a particular field of occupations, though this is not known by one taking the test. The fields of occupations for men provided for are those of the physician and biological scientist; the life insurance salesman and salesman in other special fields; the engineer, technologist, chemist, mathematician, and other workers in physical sciences; the teacher, minister, social worker,

¹ HARRY WALTER HEPNER, *Vocational Interest Quotient Booklets*, New York: Psychological Corporation, 1931.

² BINGHAM, *op. cit.*, p. 75.

³ GLEN U. CLEETON, *Vocational Interest Inventory*, Bloomington, Ill.: McKnight and McKnight, 1937.

and other workers in social sciences; the purchasing agent, business manager, clerk, and other workers in the field of business administration; the lawyer, journalist, and other workers in the legal and literary field; the skilled worker in mechanical occupations; the accountant, statistician, banker, broker, and workers in other financial occupations; the actor, musician, artist, and workers in other creative or public performance occupations.

If one could be sure that a high score on each of these nine groups of items actually indicates what it is supposed to indicate, Cleeton's inventory would be of distinct value. However, he has not yet furnished sufficient evidence on this point to be entirely convincing.

Stewart and Brainard's Specific Interest Inventories.¹ Four forms of these inventories are available—one each for men, boys, women, and girls. The forms for boys and girls are intended for ages ten to sixteen years. Each form contains 20 groups of five questions each. A question may be answered or checked in any one of five ways, thus providing for five levels or degrees of reaction to the question, from like to dislike. The 20 groups deal with 20 different types of interests as follows: artistic, commercial, creative imagination, emotional expression, esthetic, experimental, leadership, literary, manual, mathematical, mechanical, musical, observation, order, outdoor, physical, scientific, social study, and vocal expression. Each question group covers a “different phase of a special mode of expression. For example, under mechanical there is: (1) construction, (2) installation, (3) repair, (4) designing, and (5) operation.”

The authors report that:

A class of engineers were followed to graduation after taking an interest test in the freshman year. Of 22 men whose interest ranks and intelligence ranks were below median, only one remained to graduate. Of 49 men whose intelligence ranks were below median but whose interest ranks were above median, 15 remained to graduate. 43 engineers dropped out whose interest scores were above median, and 62 dropped out whose scores were below median. Only six men having interest

¹ FRANCES J. STEWART and PAUL P. BRAINARD, *Specific Interest Inventories*, New York: Psychological Corporation, 1932.

scores in engineering in the lowest quartile, remained to the senior year, out of the 300 tested.¹

They report also a fairly high degree of stability of interests as measured by the test in case of 60 ninth-grade school children who were tested in November and again in May of the same school year.

Other vocational interest inventories. Among other inventories of this type are Manson's Occupational Interest Blank for Women, the Oberlin Vocational Interest Inquiry, and Garretson and Symonds's Interest Questionnaire for High School Students. The last named of these is for the purpose of aiding eighth- and ninth-grade boys to decide whether to enter the academic, commercial, or technical curriculum in senior high school.

Present status of vocational interest inventories in vocational guidance. The present situation with respect to use of inventories of this type in a vocational guidance program is similar to that with respect to aptitude tests. Both have fascinating possibilities. Important pioneer work has been done in both fields. Both are now used to a limited extent for vocational guidance purposes. But much experimenting, much improvement in techniques, and much checking of results are necessary before either will find a large place in the guidance work of public school systems.

Nevertheless, as was said concerning aptitude tests, vocational guidance workers will find it decidedly worth while to keep informed concerning developments along the line of vocational interest inventories, and to be ready to cooperate with psychologists in the improvement of this still crude and cumbersome but promising measuring instrument.

A development that looks especially promising at this time is Thurstone's effort to apply his factorial analysis procedure to vocational interests.² Thus far he has identified eight vocational interest factors as follows: commercial, legal, athletic, academic, "descriptive," biological, physical science, and art. Each factor

¹ FRANCES J. STEWART and PAUL P. BRAINARD, *Manual of Instructions for Specific Interest Inventories*, p. 3, New York: Psychological Corporation, 1932.

² L. I. THURSTONE, "Factorial Analysis of Vocational Interests," paper presented at a meeting of the American Psychological Association, Ann Arbor, Mich., September, 1935.

has significance for a considerable group of occupations. An interest profile resulting from adequate tests of these factors should prove helpful in counseling.

SUMMARY

While one's intelligence is an important factor in determining what *occupational level* is suitable for him, his special aptitudes and interests are significant factors in connection with his choice of an *occupational group* and often of a specific occupation at that level.

Aptitude has been defined as "a condition or set of characteristics regarded as symptomatic of an individual's ability to acquire with training some (usually specified) knowledge, skill, or set of responses such as the ability to speak a language, to produce music, etc."

A special aptitude has substantially the same relationship to a particular activity or group of activities—such as art, music, salesmanship, mechanical occupations, etc.—that intelligence has to life as a whole. In both cases "capacity of the individual to adjust himself to new situations, to solve new problems, to learn" is what is meant. The difference between the two lies in the area of life's activities covered. As in case of intelligence, it is necessary to deal with present capacity rather than with native capacity, though the latter can be inferred from the former when an individual's training and experience along the line of the special activity are taken into account.

A large number of tests of special aptitudes have been devised. Some of these cover broad fields (mechanical and clerical, for example) and some cover single occupations (those of shell inspector, dressmaker, airplane pilot, and others). Good illustrations are the Seashore Tests of Musical Talent, the Minnesota Mechanical Assembly Test, the Minnesota Test for Clerical Workers, the McAdory Art Test, the Stanford Scientific Aptitude Test, and the Coxe-Orleans Prognosis Test of Teaching Ability, though the last two of these have been criticized on the ground that they are tests of intelligence rather than of aptitudes. Thus far tests of special aptitudes have proved more useful in selecting workers for particular jobs than in aiding individuals to choose suitable occupations or even occupational fields. However, their use for the latter purpose is growing. More well-

validated and reliable tests of this type and better machinery for administering them are necessary before they will play a large part in high school vocational guidance programs.

Related to aptitude tests are interest inventories, whose purpose is to compare the interests of an individual with the patterns of interests which characterize successful workers in different occupations. This procedure is based on the fact that "men engaged in a particular occupation have been found to have a characteristic pattern of likes and dislikes, which distinguish them from men following other professions." If the interest pattern of the individual who fills out the inventory form is similar to that of lawyers and quite unlike that of doctors, the conclusion is that he is better suited for law than for medicine.

Among the several vocational interest inventory forms thus far developed the Strong Vocational Interest Blank is probably the most widely used at this time. The value of this blank decreases rapidly for ages below seventeen and has little value below fifteen years.

Like aptitude tests, vocational interest inventories have fascinating possibilities. Both are used to some extent in vocational guidance programs. But much experimenting, much improvement in techniques, and much checking of results are necessary before either will find a large place in the guidance work of public school systems. However, vocational guidance workers will find it desirable to keep informed concerning developments along both of these lines and to cooperate with psychologists in the improvement of these still crude and cumbersome but promising measuring instruments.

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CHAPTER XII

THE PERSONAL DATA COLLECTING SERVICE: PERSONALITY CHARACTERISTICS, SOCIAL ENVIRONMENT, ACHIEVEMENTS, PLANS

Other factors involved in vocational success. Everyone recognizes that vocational success depends upon other factors as well as upon general intelligence and special aptitudes. Proctor found that among 131 high school pupils whom he studied, the very dullest with an I.Q. of 79 had an average scholastic record of C+, which was exactly the same as that of the second brightest of the group whose I.Q. was 137.¹ Cattell, speaking some years ago of intelligence tests, said: "When applied to school children these tests indicate what the children *can* do better than what they *will* do."² In a general way Cattell's statement will apply to aptitude tests also, as these develop, though probably in a lesser degree since one is more likely to be interested in doing the things for which he possesses a special aptitude. But interest is only one of several additional factors that must be taken into account. Drive, emotional stability, initiative, ambition, personal disposition, and a whole group of character traits including industry, honesty, conscientiousness, dependability, courtesy, cooperativeness, and loyalty must always be recognized as of great importance. Introversion-extroversion, dominance-submission, and self-sufficiency are other characteristics that claim attention.

It will be observed that some of these qualities are, to a large extent at least, hereditary while others are more the result of training and experience than of hereditary influences. But, however derived, they have significance for vocational planning since occupations differ in the extent to which they require this or that quality on the part of those who engage in them.

¹ WILLIAM MARTIN PROCTOR, *Educational and Vocational Guidance*, p. 41, Boston: Houghton Mifflin Company, 1925.

² J. McKEEN CATTELL, unpublished address before the Psychological Section of the American Association for the Advancement of Science, 1924.

The Downey tests of will-temperament. As long ago as 1923, Downey presented her tests for measuring what she called will-temperament, and which she defined as the innate relatively permanent dynamic pattern of the individual. The phases of the dynamic pattern which she considered most important were: "(1) those of speed and fluidity of reaction, (2) those of forcefulness and decisiveness of reaction, (3) those of carefulness and persistence of reaction."¹

In discussing the uses of will-temperament testing for guidance purposes Downey says:

In giving boys and girls vocational as well as educational advice one should know much of their temperament peculiarities. One needs above all to reckon with such things as aggressiveness, speed, interest in detail, perseveration. Large demands will be made upon applied psychology of temperament when once it succeeds in establishing itself.²

For various reasons Downey's tests have not been favorably received by psychologists. Certainly they are far from practicable as part of a program which should be attempted for all pupils in the school system. But they do constitute a significant early step in the effort to measure important aspects of human personality.

Tests of trustworthiness. An interesting attempt was made by Voelker³ to measure certain character traits among boys who were mostly ten to fourteen years of age. He gave cleverly devised tests of truthfulness, honesty, reliability, persistence in carrying out instructions in spite of distractions, and other qualities, all of which he summed up as trustworthiness, to boys in Boy Scout troops, public schools, and private schools. In all, ten tests were given, in each of which the temptation to be untrustworthy in some respect was presented, with, apparently, no chance of discovery. Voelker's purpose, however, was not to develop tests of these qualities for general use but as an aid in determining whether trustworthiness is increased under definite training to that end such as is provided by the Boy Scout organi-

¹ JUNE DOWNEY, *The Will-temperament and Its Testing*, p. 60, Yonkers-on-Hudson: World Book Company, 1923.

² *Ibid.*, p. 307.

³ PAUL FREDERICK VOELKER, *The Function of Ideals and Attitudes in Social Education*, Teachers College Contributions to Education, No. 122, New York: Teachers College, Columbia University, 1921.

zation, for example. No effort has been made, so far as the writer is aware, to use these tests for purposes of vocational guidance or placement, though they would appear to have such possibilities, except for the amount of work involved in giving them.

Tests for taxicab drivers. In an effort to reduce accidents among taxicab drivers of the Yellow Cab Company of Chicago by better methods of selection, Snow¹ developed and used tests for recklessness, carelessness, emotional instability, and lack of foresight. A resulting reduction in accidents is evidence of merit in the tests. Others have since carried this type of testing further but for promotion of safe driving by owners of automobiles, rather than for purposes of vocational selection.

The Allport Ascendancy-Submission Reaction Study. As indicated by its title, this is an effort to discover the disposition of an individual to dominate his fellows or to be dominated by them. This A-S Reaction Study, as it is generally called,

. . . presents a number of situations in each of which the subject is required to select one of a group of standardized responses which most nearly characterizes his usual behavior in that situation. Not all of the responses chosen will reveal an invariable ascendancy or submission, for most people show *both* types of behavior at different times and under different circumstances. This study, however, has enough situations to detect which of these two types of reaction, if either, is the more characteristic; and the total score gives an expression of the dominance of the one or the other.²

Two forms of the A-S Reaction Study, one for men and one for women, were designed by the Allports for use with college students or recent graduates. A third form, prepared later by Beckman, is an adaptation of the original men's form for business use.

The Allports found that the median score on this test of 87 chain-store executives was +10; of 20 general managers in the same organization, +21; of 29 department heads and bureau chiefs of the city government of Cincinnati, +17.1; of 31 water

¹ A. J. SNOW, "Tests for Chauffeurs," *Industrial Psychology*, I (January, 1926).

² R. O. BECKMAN, *The A-S Reaction Study*, Revision for Business Use, adapted from the original form of Gordon W. Allport and Floyd H. Allport, New York: Psychological Corporation, 1932.

meter readers, -0.9 . Beckman reports that on the adapted form the median of 50 college juniors and seniors was -1 , with a range of $+29$ to -35 ; the median of 110 managers of variety stores (chain) was $+8$, with a range of $+44$ to -26 ; the median of 20 junior executives in a public utility, $+4.5$, with a range of $+23$ to -8 ; and the median of nonexecutives in a public utility was -4 , with a range of $+14$ to -23 .

While results obtained indicate that the A-S Reaction Study scores have significance for vocational guidance, the authors themselves strongly urge that these scores be regarded as suggestive rather than conclusive, and stress the fact that many other items of information concerning the individual must be taken into account along with his A-S score.

The Bernreuter Personality Inventory. The purpose of the Bernreuter Personality Inventory is to measure several different aspects of personality at one time. The inventory consists of 125 personal questions before each of which the subject is expected to draw a circle around "yes," "no," or "?." "Do you daydream frequently?" and "Do people ever come to you for advice" are samples of the questions.

The six scales now available for application to the answers given by the subject are:

B1-N. A measure of neurotic tendency. Persons scoring high on this scale tend to be emotionally unstable. Those scoring above the 98 percentile would probably benefit from psychiatric or medical advice. Those scoring low tend to be very well balanced emotionally.

B2-S. A measure of self-sufficiency. Persons scoring high on this scale prefer to be alone, rarely ask for sympathy or encouragement, and tend to ignore the advice of others. Those scoring low dislike solitude and often seek advice and encouragement.

B3-I. A measure of introversion-extroversion. Persons scoring high on this scale tend to be introverted; that is, they are imaginative and tend to live within themselves. Scores above the 98 percentile bear the same significance as do similar scores on the B1-N scale. Those scoring low are extroverted; that is, they rarely worry, seldom suffer emotional upsets, and rarely substitute daydreaming for action.

B4-D. A measure of dominance-submission. Persons scoring high on this scale tend to dominate others in face to face situations. Those scoring low tend to be submissive.

F1-C. A measure of confidence in oneself. Persons scoring high on this scale tend to be hamperingly self-conscious and to have feelings of

inferiority; those scoring above the 98 percentile would probably benefit from psychiatric or medical advice. Those scoring low tend to be wholesomely self-confident and to be very well adjusted to their environment.

F2-S. A measure of sociability. Persons scoring high on this scale tend to be non-social, solitary, or independent. Those scoring low tend to be sociable and gregarious.¹

Coefficients of reliability for each of the first four scales ranged from .85 to .92, as computed by their author. Also, he found a high correlation between scores obtained on the four parts of his inventory and tests of the same qualities by such psychologists as Thurstone, Laird, and the Allports.

Bernreuter reports that this inventory has been used successfully with high school students, college students, and adults. Others who have used it differ considerably in their estimate of its value for vocational guidance purposes. The University of Minnesota Employment Stabilization Research Institute reported that personality characteristics as measured by the Bernreuter Inventory do not differentiate clerical workers of various types from the general population.² On the other hand, the institute reported that class A factory workers, comprising about 3 per cent at the top of the hierarchy of skilled mechanics, appear to have a distinctive personality pattern, characterized by greater than average "self-sufficiency" and less than average "extroversion" and "stability," though the less skilled classes of factory workers, B, C, D, and E, comprising 97 per cent, show no striking differences as measured by the Bernreuter Personality Inventory.³

The Bell Adjustment Inventory.⁴ As stated in the manual accompanying it, this self-administering adjustment inventory

¹ ROBERT G. BERNREUTER, *Manual for the Personality Inventory*, Stanford University, Calif.: Stanford University Press, 1935.

² DOROTHY M. ANDREW and DONALD G. PATERSON, *Measured Characteristics of Clerical Workers*, University of Minnesota Employment Stabilization Research Institute Studies, Vol. III, No. 1, Minneapolis: University of Minnesota Press, 1934.

³ VERNE C. FRYKLUND, *The Selection and Training of Modern Factory Workers*, p. 15, Minneapolis: University of Minnesota Press, 1934.

⁴ HUGH M. BELL, *The Adjustment Inventory*, Stanford University, Calif.: Stanford University Press, 1934.

provides four separate measures of personal and social adjustment:

a. Home Adjustment. Individuals scoring high tend to be unsatisfactorily adjusted to their home surroundings. Low scores indicate satisfactory home adjustment.

b. Health Adjustment. High scores indicate unsatisfactory health adjustment; low scores, satisfactory adjustment.

c. Social Adjustment. Individuals scoring high tend to be submissive and retiring in their social contacts. Individuals with low scores are aggressive in social contacts.

d. Emotional Adjustment. Individuals with high scores tend to be unstable emotionally. Persons with low scores tend to be emotionally stable.

The inventory consists of 140 questions to each of which the subject is asked to make response in the same manner as in case of the Bernreuter Personality Inventory. Sample questions are: (a) "Do you sometimes feel that your parents are disappointed in you?" (b) "Have you had considerable illness during the last ten years?" (c) "Did you ever take the lead to enliven a dull party?" (d) "Do you frequently have spells of the 'blues'?"

According to its author, the Personal Inventory has been successful when used with persons of high school and college age of both sexes. In general it has been favorably regarded by those who have used it.

Other tests and inventories in the field. One who is deeply interested in possible vocational guidance values of other efforts in this field should examine the Thurstone Neurotic Inventory, the Laird C2 Introversiion Test, the Willoughby EM (Emotional Stability) Scale, the Woodworth-Wells Psychoneurotic Inventory, the Pressey X-O Test, the Neyman and Kohlstadt Introversiion-Extroversiion Test, and the Kent-Rosanoff Association Test.

Significance of personality inventories for vocational guidance. Words of caution on this point were sounded by Bingham several years ago when he said:

Caution is needed for two reasons: the low reliability of the individual measures, and the great flexibility or modifiability of many personalities. Temperament and habitual emotional attitude differ in these regards from intelligence, which remains roughly constant with the passage of

the years. The introvert cannot greatly alter his I.Q., but he sometimes outgrows his shyness, suppressions, his tendencies to reverie, his slowness to act. The extrovert may learn to meditate, to be more considerate, to check a natural abruptness to action.¹

Even earlier Kitson pointed out that we do not yet have scientific proof that there are general traits like industriousness, aggressiveness, and the like, which can be measured and which express themselves equally pronouncedly in all the activities of the individual; nor are we justified in assuming that precisely these traits are those called for in certain specific vocations. He adds:

Perhaps they are. We cannot assert it, however, until we have measured a number of workers in different vocations and have discovered that successful lawyers, for example, stand higher with respect to the trait designated as "aggressiveness" than do unsuccessful lawyers, or persons in a vocation said to call for lack of aggressiveness.²

No doubt it is true, as Bingham says, that personality traits of many individuals are modified considerably with advancing years. Furthermore, as Kitson points out, the degree of industriousness or aggressiveness evidenced by an individual varies greatly in different activities. However, it still seems probable, from the evidence already available, that only in exceptional cases and usually in comparatively minor respects does the *total personality pattern* of most individuals change with advancing years or differ in different activities.

It seems reasonable to expect that, with growing interest in the subject on the part of psychologists, personality patterns of different occupational groups will be determined much more satisfactorily than at present. Therefore, while proceeding cautiously in the use of personality tests and inventories for vocational guidance purposes, vocational counselors and other personnel workers may look forward to more reliable objective measuring instruments of personality and to their wider use. Thus far no evidence has been presented which bars the possibility that personality patterns, or profiles, may not find at least

¹ WALTER VAN DYKE BINGHAM, "Personality and Vocation," *British Journal of Psychology*, XVI (1925-26), 361.

² HARRY DEXTER KITSON, *The Psychology of Vocational Adjustment*, p. 179, Philadelphia: J. B. Lippincott Company, 1925.

as large a place as interest patterns in future vocational guidance programs, even though determining personality patterns may well be a more complicated and difficult task.

PERSONALITY RATING SCALES

Nature of a personality rating scale. The efforts to measure aspects of personality that have just been considered are objective in nature. In a given situation any competent user of the measuring instrument should obtain the same result as any other competent user. Another and much more extensively used instrument for measuring personality traits is the rating scale. Everyone, consciously or unconsciously, forms opinions concerning the personality traits of those whom he knows well. These are, of course, purely subjective judgments, often colored favorably or unfavorably by chance circumstances. The personality rating scale is nothing more nor less than the result of efforts to systematize and refine this common practice of human beings to form subjective judgments concerning their fellows. The purpose is to obtain a reliable and useful estimate of an individual's personal qualities.

Types of rating scales. A well-known type is the numerical rating scale. The rater is asked to estimate the degree to which the person rated possesses each trait under consideration, and to indicate this on a numerical scale ranging from 1 to 3, or 1 to 5, or 1 to 7, or 1 to 10, 1 usually representing the lowest degree and 3, 5, 7, or 10, depending on the number of points in the scale, representing the highest degree. Sometimes a straight line takes the place of the numbers and the rater is asked to place a check mark at some point along this line. The names "linear" and "graphic" have both been applied to this type. In case of a third type, the rater is asked to arrange the group of people being rated in order of merit on each trait. A fourth type, the man-to-man rating scale, provides for comparison of the person who is being rated with three or five persons well known to the rater—one of whom possesses the particular trait to a low degree, another to a high degree, and the others to intermediate degrees.

Precautions in using rating scales. Experience with rating scales has indicated that a number of precautions need to be observed if they are to prove of greatest value.

1. It is obvious that the independent judgments of three or five people who know the rated person well are more reliable than the judgment of a single rater. In fact, some authorities say the number of raters should be three to eight, while others suggest five to ten in order that the composite result may have reliability. Schools that make use of personality rating scales, therefore, provide for ratings by several different people. Sometimes an average of the different ratings is computed and recorded.

2. Those who do the rating should have a common understanding of the traits on the scale. This calls for a clear definition of each trait. A good type of definition is one which states in specific terms how an individual behaves who possesses the particular trait in the highest degree and in the lowest degree represented on the scale. An illustration is found in the rating scale developed by Hughes in the schools of Pasadena, Calif. The highest rank in regularity-persistency is described as follows:

Is found in the right place at the right time. Works regularly and on time. Completes job before leaving it. Perseveres even when making little progress. Holds tenaciously to worth-while purposes. Is generally consistent in thought and behavior.¹

The lowest rank in the same quality is described in the following language:

Is seldom found in right place at right time. Works sporadically. Habitually leaves job unfinished. Is discouraged by trifling obstacles. Is inconsistent in thought and behavior. Is conspicuous for procrastinating.²

The highest rank in cooperativeness carries this description:

Participates extensively in the worthy group activities. Gives up own preferences when they interfere with the general good spirit and welfare of the group. Is extraordinarily fair-minded and generous. Is democratic. Does not expect special favors or privileges. Seems happy in his work and play with others. Is always ready to do his part in any legitimate cooperative undertaking.³

¹ W. HARDIN HUGHES, "A Rating Scale for Individual Capacities, Attitudes, and Interests," *Journal of Educational Method*, III (October, 1923), 60.

² *Ibid.*, p. 60.

³ *Ibid.*, p. 61.

These descriptions were later shortened, as will be noted by examining the later form of the scale found on page 225.

3. It is better to rate all individuals of a group on the first trait, then on the next, then on the next, until the job is finished than to rate each individual, one after the other, on all the traits. The former procedure gives greater accuracy and the rater usually finds it easier and less confusing.

4. The list of traits on a rating scale should be short and each item should be selected with great care. The Hughes list originally included twelve items. This was later reduced to seven—industry, accuracy, initiative, reliability, cooperation, leadership, and physical vitality.¹ Eurich and Wrenn state that from three to five traits is the accepted maximum for a good scale.²

5. No rater should be asked to rate every individual in a group on every trait on the rating scale. It should be understood that no judgment is expected unless the rater has had opportunity to form a fairly reliable judgment. This was provided for in the Pasadena scale by asking that only those teachers who have students in group activities rate them on cooperation and leadership.

Sample personality rating scales. The Hughes Graphic Rating Scale and the Personality Report form, prepared by the American Council on Education, are presented as illustrations. It will be noted that both of these are of the linear (sometimes called graphic) type, calling for a check mark on each trait by the rater. The Personality Report of the American Council provides, also, for the rater to record instances that support his judgment.

Personality ratings of students by their fellows. In some high schools each member of a home-room group, 30 or 40 in number, has been asked to rate every other member of the group on certain personality traits. If the matter is properly presented to the group valuable results are often obtained in this way.

¹ W. HARDIN HUGHES, "General Principles of Rating Trait Characteristics," *Pasadena Public Schools Educational Research Bulletin*, III, Nos. 5 and 6 (February and March, 1925).

² ALVIN C. EURICH and C. GILBERT WRENN, *Appraisal of Student Characteristics and Needs*, Thirty-seventh Yearbook of the National Society for the Study of Education, Part I, Chap. II, p. 59, Bloomington, Ill.: Public School Publishing Company, 1938.

HUGHES GRAPHIC RATING SCALE¹
For Habits, Attitudes, and Traits

Name.....			Date	
Last	First	Middle	Semester	Year
MINIMUM RATING		AVERAGE	MAXIMUM	
<i>Industry</i>				
Works sporadically			Works regularly and on time	
Seldom completes work			Habitually completes work	
Uses time injudiciously			Makes judicious use of time	
<i>Accuracy</i>				
Expresses ideas inaccurately			Expresses ideas accurately	
Does inexact work			Accomplishes exact work	
Uses time injudiciously			Makes judicious use of time	
<i>Initiative</i>				
Succumbs to difficulties			Overcomes difficulties	
Shows little curiosity			Shows intellectual curiosity	
Seldom starts anything new			Initiates undertakings	
<i>Reliability</i>				
Neglects promises and obligations			Fulfills promises, obligations	
Does not admit error when wrong			Admits error when shown wrong	
Is undependable in word and deed			Is honest in word and deed	
<i>Cooperation</i>				
Avoids worthy group activities			Participates in worthy group activities	
Seems unhappy in team work			Seems happy in team work	
Does not subordinate self			Subordinates self to group	
<i>Leadership</i>				
Fails to secure support			Wins support for his cause	
Prefers plans made by others			Plans for and directs others	
Lessens enthusiasm of the group			Arouses enthusiasm in the group	
<i>Physical Vitality</i>				
Avoids vigorous activities			Active in vigorous activities	
Exhibits little endurance			Exhibits endurance in continued effort	
Possesses physically weak personality			Possesses forceful personality	

Instructions: Keeping the definition of the trait in mind, rate the student between "Minimum" and "Maximum" by placing a check (✓) appropriately on the line. Try to locate the student according to his standing relative to the average for his age. The check may be placed anywhere on the line.

Person Rating..... School.....

¹ W. HARDIN HUGHES, "General Principles of Rating Trait Characteristics," *Pasadena Public Schools Educational Research Bulletin*, III, Nos. 5 and 6 (February and March, 1925).

REVISION A, MAY 9, 1929
 AMERICAN COUNCIL ON EDUCATION
 744 JACSON PLACE, WASHINGTON, D. C.

PERSONALITY REPORT

The information on this sheet is confidential

Name of student.....Name of institution.....

Please return this sheet to.....

Selection and guidance of students are based on scholastic records of achievement, health and other factual records. Personality, difficult to evaluate, is of great importance. You will greatly assist in the education of the student named if you will rate him with respect to each question by placing a check mark on the appropriate horizontal line at any point which represents your evaluation of the candidate.

If you have had no opportunity to observe the student with respect to a given characteristic, please place a check mark in the space at the extreme right of the line.

In the rectangle below each rating scale please describe briefly and concretely significant performances and attitudes which support your judgment and which you yourself have observed.

Let your statements answer specifically the questions of the rating scale by showing how the student manifested the qualities mentioned.

Do not be satisfied with the statement of an opinion concerning matters of fact, if the facts themselves can be presented.

Select those illustrations of conduct which are consistent with the personality of the student as you have observed and understood it.

Bear in mind that from as many accurate observers as possible the college desires to secure concrete descriptions of the student's personality as exhibited in many situations and that the purpose is an understanding of the student's personality as a whole so that he and all concerned with his education may guide his development to the highest.

The following items illustrate the way in which observers have reported evidence in support of their checking of the highest answer to the second question (B):

Of a college senior: "In my course in Elizabethan drama he voluntarily built to scale models of the Blackfriars Theater and the Fortune Theater based on the work of Chambers, Albright and others and demonstrated Elizabethan methods of staging several of the plays read."

Of a college senior: "Independently collected and classified correctly one hundred type specimens of fossils found in the neighborhood of the college."

Of an eighth grade boy: "Finding in English assignment, the introduction to Burns' 'The Cotter's Saturday Night,' a reference to Robert Fergusson's 'The Farmer's Ingle' as a possible inspiration of Burns' poem, he looked up Fergusson's poem in the home library and compared it with that of Burns. At the same time, desiring to read Burns in the Scottish way he mastered the phonetic system of Sir James Wilson's 'The Dialect of Robert Burns as spoken in Central Ayrshire' which he also found in the home library, and so interested the boys of his class in the pronunciation of Scottish words that even at the end of the year the lads still called each other by appropriate Scottish nicknames and used Scotticisms which they found in Burns and Wilson."

"At the age of eleven began collecting diatoms from local ponds and streams and studying their forms under his own microscope. Now possesses collection of microscope slides, including some presented to him by scientists in Department of Agriculture and Carnegie Institution, specimens collected by Shackleton, Scott and other expeditions."

How well do you know this student?.....

.....

.....

.....

Signature

Date

Position

Address

Name of student.....

A: How are you and others affected by his appearance and manner?	Avoided by others	Tolerated by others	Liked by others	Well liked by others	Sought by others	No opportunity to observe
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Please record here instances that support your judgment.

B. Does he need constant prodding or does he go ahead with his work without being told?	Needs much prodding in doing ordinary assignments	Needs occasional prodding	Does ordinary assignments of his own accord	Completes suggested supplementary work	Seeks and sets for himself additional tasks
---	---	---------------------------	---	--	---

Please record here instances that support your judgment.

C. Does he get others to do what he wishes?	Probably unable to lead his fellows	Lets others take lead	Sometimes leads in minor affairs	Sometimes leads in important affairs	Displays marked ability to lead his fellows; makes things go
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Please record here instances that support your judgment.

D. How does he control his emotions?	Too easily moved to anger or fits of depression, etc.	Tends to be over emotional	Usually well balanced	Well balanced	Unusual balance of responsiveness and control
	Unresponsive, apathetic	Tends to be unresponsive			

Please record here instances that support your judgment.

E. Has he a program with definite purposes in terms of which he distributes his time and energy?	Aimless trifler	Aims just to "get by"	Has vaguely formed objectives	Directs energies effectively with fairly definite program	Engrossed in realizing well formulated objectives
--	-----------------	-----------------------	-------------------------------	---	---

Please record here instances that support your judgment.

While the raters lack maturity they usually know each other much better than their teachers know them. Also, the large number of ratings helps to assure reliability of the composite result. Of course, the same precautions need to be observed as when teachers do the rating.

This method of obtaining estimates of personality traits of high school pupils was used recently by two of the author's graduate students¹ who were making case studies of the 25 highest in intelligence and the 25 lowest in intelligence, as measured by the Detroit Alpha Intelligence Tests, in a school of 350 pupils. All pupils in the school were rated by their fellow home-room members on seven traits and composite ratings for each pupil were made, but this report concerns only the 50 mentioned above. The following table gives the distribution of the composite ratings for the two groups on each of the traits:

COMPARISON OF PUPIL PERSONALITY RATINGS OF SUPERIOR AND DULL GROUPS*

Personality traits	High		Good		Fair		Poor	
	Superior group	Dull group	Superior group	Dull group	Superior group	Dull group	Superior group	Dull group
Industry.....	14	1	9	8	2	11	0	5
Cooperation....	9	0	13	10	3	12	0	3
Courtesy.....	7	0	15	16	3	7	0	2
Leadership.....	9	0	8	6	7	10	1	9
Self-reliance....	13	0	7	12	5	8	0	5
Dependability..	11	0	13	14	1	10	0	1
Likableness.....	7	2	11	17	7	6	0	0
Total.....	70	3	76	83	28	64	1	25

* CLARENCE E. HINCHEY, "A Study of Twenty-five Dull Children in a Senior High School," unpublished master's thesis, Ann Arbor: University of Michigan, 1935.

Self-ratings on personality traits. Attention was given in an earlier chapter to self-analysis as a means of aiding an individual

¹ DOROTHEA E. ELBING, "A Study of Twenty-five Superior Children in a Senior High School," unpublished master's thesis, Ann Arbor: University of Michigan, 1935.

CLARENCE E. HINCHEY, "A Study of Twenty-five Dull Children in a Senior High School," unpublished master's thesis, Ann Arbor: University of Michigan, 1935.

to understand himself, and sample forms used for this purpose were presented. These forms call for the individual's estimate of himself as regards several important aspects of personality. Such self-ratings, if available to the pupil's counselor, are often quite valuable for use in arriving at an understanding of the pupil's personality, especially when considered along with the same pupil's ratings by teachers or fellow pupils. It may be better in some instances to have the pupil turn in a rating on himself on the same scale that teachers of the school use in rating pupils, rather than to depend upon the longer self-analysis form which is designed primarily for another purpose.

Usefulness of personality rating scales and tests compared.

It must be remembered that a rating on aspects of personality, however refined the methods of obtaining it may be, is still subjective in character. A reliable and valid objective measure is always to be preferred. However, adequate objective measures in this field are not yet available, as has been noted. Moreover, there are difficulties in using such as are available with large numbers of pupils. It seems likely that much time will elapse before such measures come into general use in the schools. On the other hand, good rating scales are available and can be used in schools without serious difficulties. Since a careful estimate is better than no measure at all, it seems likely that, for some time at least, rating scales will play a larger part than tests in providing the data concerning personality traits which are needed for use in vocational guidance.

SOCIAL ENVIRONMENT DATA

However complete and accurate the information may be which is brought together concerning an individual as a result of tests, inventories, scales, and other measuring instruments, it is still desirable to obtain considerable data concerning his social environment. On the one hand, these data are a valuable aid to the counselor in understanding and interpreting the data from other sources. On the other hand, they themselves give important suggestions as to what may be expected of the individual in the future. What he will do in a particular situation, in fact whether he should do this or that, often depends upon conditions that belong to his social environment. And this holds true in matters of vocational planning as well as in those of other kinds of plan-

ning. Also, in view of the present limitations on the completeness and reliability of the other types of information available in most schools, it is particularly desirable to give careful attention to social environment data, which may be obtained fairly easily in any community.

Data concerning the home. When one undertakes to list items concerning an individual pupil's social environment that have significance in relation to that pupil's vocational plans, the first group of items to claim attention concerns his home. Are the father and mother both living? Are they living together? How many older brothers are there in the family? Older sisters? Younger brothers? Younger sisters? What is the father's occupation? If the mother is employed outside the home, what is her occupation? Are any brothers or sisters employed? If so, what is their work? What are the occupations of uncles and aunts? Is there any "hereditary" occupation in the family? What is the general education of the father? Of the mother? What special vocational education has each of the parents had? How active are the parents in community affairs? In what kinds of community affairs are they active? What educational plans have the parents for the pupil in question? What vocational plans, if any? Are they in position to finance these plans or others that may be made? If not fully, to what extent?

The Sims Score Card for Socio-economic Status,¹ designed for use with pupils of grades 4 to 12 inclusive, is used by some schools for the purpose of obtaining certain significant data concerning the home environment of pupils.

Data concerning the pupil's associations outside the home. The general type of neighborhood in which the pupil lives and finds his companions is an item which may exercise greater influence on his interests and personality traits than is generally realized. It may, also, have supplied him with information, accurate or inaccurate, favorable or unfavorable, concerning certain occupations. The author's attention was called some time ago to a boy of high I.Q. whose father was a production worker in an automobile factory and whose associates were sons of

¹ VERNOR L. SIMS, *Manual of Directions for the Sims Score Card for Socio-economic Status*, Bloomington, Ill.: Public School Publishing Company, 1927.

fathers engaged in the same type of work. In this case both home influences and neighborhood influences tended to restrict the boy's vocational outlook. Possessing sufficient intelligence for any kind of occupation, he was planning to become a machinist, a job which production workers generally consider more desirable than their own—a higher level occupation. Apparently the boy's environment had influenced him against production work in favor of the work of a machinist. Perhaps his choice was wise, but if the neighborhood occupational horizon had been broader he might very well have developed an interest in some other occupation above the production worker's level.

The clubs, "gangs," societies, and other neighborhood and school organizations of which the pupil is or has been a member, and the general characteristics of his friends and cronies should be taken into account, also. It is generally recognized that these are important influences in the development of interests and of certain personality traits. Sometimes the interests are wholesome and the character traits desirable and sometimes they are quite the reverse. In either case membership in the organization and personal friends are significant items for use in vocational counseling. Such an organization as the Boy Scouts, for example, features discovery of aptitudes and development of vocational and avocational interests by means of a program that is definitely planned for this purpose, as well as to contribute to health and character in its members.

The pupil's recreations of all kinds deserve attention also. The amount and character of his voluntary reading; the type, extent, and environment of his social activities; his amusements—theaters, movies, concerts, sport contests, and the like; and his physical recreations such as tennis, golf, baseball, swimming, and hiking, come into the picture if it is to be complete.

Closely related to his recreations is the traveling he has done. Where has he been? Especially, what sort of things impressed him most? Was his interest strongest in the habits and customs of the people, the social, economic, and political problems, the industrial plants, the natural scenery, the historical objects, or in some other special feature of the places visited? What impresses one in the varying environment of travel often gives a clue to his vocational interests.

ACHIEVEMENT DATA

The physical and psychological characteristics of the individual pupil and the more significant environmental influences which affect him having been noted, his achievements next deserve consideration. What has he done?

Achievements in school subjects. The pupil's accomplishments in his school subjects have, of course, long been matters of much concern to school authorities. Great care is taken to preserve marks filed at the end of each term for their pupils by teachers of the various subjects. Since these marks become permanent records of the achievements of pupils in the subjects pursued, it is obvious that every reasonable effort should be made to ensure their reliability.

Reliability of school grades. It must be admitted that in many school systems more thought has been given to preservation of marks than to making sure that they are fair measures of pupil achievement. As a matter of fact, it has been shown that a teacher's marks often represent, not pupil achievement only, but also the teacher's estimate of native ability, effort, attitude, and other things, including even what students call "apple polishing." It must also be kept in mind that standards of different teachers in marking their pupils differ greatly. It has happened that the same examination paper was marked A by one teacher and D by another teacher of the same subject.

Moreover, it should not be forgotten that a single mark covering an entire semester's work does not always fairly represent the work actually done by the pupil. This is true especially in such subjects as general shop, which may be made up of several units such as woodwork, sheet-metal work, machine-shop work, and electrical work. A pupil may deserve a poor or average mark on every unit except one, say electrical work, and an A on that one unit. The same thing may happen in physics with its several parts or units dealing with heat, light, sound, electricity, etc., and also in general science.

Facts of this kind, which are of great significance for vocational guidance, are lost in an average grade for the semester. To be sure, a pupil's complete set of marks in school subjects to date, including elementary and high school work, is much more reliable than his mark in a single subject, since the marks of many

teachers are involved. A counselor is interested in a pupil's total subject marks as well as in those of particular subjects.

One effort in the direction of obtaining greater reliability in pupils' marks has been to require teachers to rate effort, interest, attitude, neatness, etc., independently of accomplishment. Even then most teachers find it difficult to prevent personality impressions from influencing subject grades.

Standardized achievement tests. Standardized objective tests on material covered in school subjects have contributed much, and no doubt will contribute much more, to reliability of grades or marks in the various subjects. In fact, no better single way of making school marks mean what they are supposed to mean is available, if the tests are used properly. No more carefully prepared tests of this type are available than the Cooperative Achievement Tests designed for high school and college classes by the Cooperative Test Service of the American Council on Education.¹ The efforts of specialists in subject fields and experts in test construction have been combined in the preparation of these tests. A wide range of high school subjects is covered, including English, French, German, Spanish, Italian, Latin, algebra, plane geometry, solid geometry, trigonometry, mathematics for grades 7, 8, and 9, general science, biology, physics, chemistry, botany, zoology, social studies, American history, ancient history, modern European history, economics, and others. Within each of several subject fields special aspects of the work are covered by separate tests. For example, in the field of English, tests are available in mechanics of expression, effectiveness of expression, reading comprehension, vocabulary, literary acquaintance, and literary comprehension, as well as in combinations of certain of these aspects of high school English work.

In addition to the Cooperative and other well-known tests of this type in individual school subjects, are single tests which are designed to measure achievement in a group of subjects. One of the best known of the latter is the Stanford Achievement Test: Form Z.² This test is planned for grades 4 to 9. Ten items in

¹ *The Cooperative Achievement Tests: A Handbook Describing Their Purpose, Content, and Interpretation*, New York: Cooperative Test Service of the American Council on Education, 1940.

² TRUMAN L. KELLY, GILES M. RUCH, and LEWIS M. TERMAN, *Stanford Achievement Test*, Yonkers-on-Hudson: World Book Company, 1932.

all—paragraph meaning, word meaning, dictation, language use, literature, history and civics, geography, physiology and hygiene, arithmetic reasoning and arithmetic computation—are included.

A similar test on a higher level is the Sones-Harry High School Achievement Test. Its authors stress the value of this test in educational and vocational guidance of secondary school students or college freshman. "The test covers the four fields usually required of students in the secondary school; namely, Language and Literature, Mathematics, Natural Science, and Social Studies. . . . The range of difficulty of the test is sufficient to measure reliably from Grade 9B to groups of practice teachers in the senior year of college."¹

The Iowa High School Content Examination² is another test of this type which is given by many higher educational institutions to freshmen entering college. This test covers the four fields of English, mathematics, science, and history and the social sciences.

It is obvious that scores made on well-chosen standardized tests of achievement in school subjects constitute valuable data for vocational guidance purposes. However, it should always be kept in mind that such scores must be considered in connection with all the other data available. Achievement tests do not measure development of critical thinking or of ability to cooperate with others, for example, as has been pointed out by Eurich.³ They are designed to measure achievement only.

OCCUPATIONAL PROFICIENCY TESTS

An occupational proficiency test, as the name implies, is for the purpose of determining an individual's ability to perform the work of a specific occupation. Training for and experience in the occupation are assumed, and the test is designed to measure the results of these or to find out what stage of progress the individual has achieved. In a guidance program this type of

¹ W. W. D. SONES and DAVID P. HARRY, JR., *Manual of Directions for the Sones-Harry High School Achievement Test*, pp. 2-3, Yonkers-on-Hudson: World Book Company, 1929.

² G. M. RUCH, G. U. CLEETON, and G. D. STODDARD, *Iowa High School Content Examination*, Iowa City: Bureau of Educational Research and Service, University of Iowa, 1925.

³ ALVIN C. EURICH, "A Changed Conception of Evaluation," *California Journal of Secondary Education*, XIV (October, 1939), 332.

test has its greatest value as an aid to the placement officer in deciding whether a pupil shall be recommended for a particular position requiring known standards of proficiency. Tests of this type are valuable, also, in determining when a pupil in training for an occupation has mastered particular units of that occupation.

In a sense all tests given by vocational teachers to their pupils are tests of occupational proficiency. The teacher in giving a test seeks to find out what the pupil can do in the occupation for which he is preparing. But vocational teachers, like all others, differ as to standards of attainment which should be expected upon completion of a given course of training, and differ still more in the tests they devise for measuring this attainment. They differ also in the way they rate the work done by a pupil both throughout the course and in the tests given. On these accounts the placement officer knows very little as to the actual vocational proficiency of pupils who come to him for assistance in finding employment, even though he has their ratings by vocational teachers. In this situation the need for standardized occupational tests which can be rated objectively is very apparent.

A number of individuals have constructed and used tests of this character, and in some instances efforts have been made to extend the use and gain general acceptance of these tests. Especially has this been true in the case of stenography and type-writing. Among the best known tests of proficiency in these subjects are those of Bills, Burt, Cody, Hoke, O'Rourke, and Thurstone. One of the most recent of these and generally considered one of the best deserves brief description here.

The Typist and Stenographer Examinations of the U.S. Civil Service Commission. These were prepared by O'Rourke and his assistants. Tests in typing from plain copy, typing from rough draft, and taking and transcribing dictation are included. In addition, a 75-minute general test is given which is designed to measure the adaptability, mental alertness, and knowledge needed by typists and stenographers. Commenting on these examinations, Bingham says:

The three tests of proficiency in typing and stenography, with the accompanying tables of norms, enable a teacher to ascertain which ones of his students have reached the standards of performance required in business firms and in government offices; while the General Test

serves to measure a student's aptitude for clerical work and indicates in a general way the level of clerical employment to which he is suited.¹

The army trade tests. The most comprehensive undertaking in the construction of occupational proficiency tests is found in the trade tests devised by the War Department of the United States government during the First World War.² In filling out the required blanks when he entered the army, each man was called upon to state his previous occupation. As workmen were needed for the different trades, men were selected and assigned upon the basis of these statements. It was soon found that men who had given their previous employment as electrician, for example, ranged all the way from novices to expert electricians. It became necessary to classify those who called themselves electricians, and those who professed other trades as well, so that when a worker of any grade was needed he could be selected at once. This gave rise to the trade tests by means of which four grades of workers were differentiated: novices who possessed practically no trade knowledge or skill; apprentices who showed a fair degree of proficiency in the trade; journeymen who could be relied upon to perform ordinary trade jobs satisfactorily; and expert workers who could be expected to meet any emergency in their field.

Three forms of tests were developed for each of 83 trades. Psychologists, engineers, trade teachers, and expert trade workers cooperated in their preparation. One form, the oral trade tests, consisted of a series of 15 to 20 carefully chosen questions concerning materials, tools, machines, and processes used in the trade, how these are used, and the principles underlying their use. The questions, requiring very brief answers (often a single word), were such that only a workman who had had extensive experience in the trade could make a high score in the test.

The second form of test, the picture trade test, consisted of an equally careful selection of pictures of tools, machines, and processes of the trade, which were shown one after the other to the subject. When a picture was shown the examiner asked a question about it which the subject was expected to answer

¹ WALTER VAN DYKE BINGHAM, *Aptitudes and Aptitude Testing*, New York: Harper & Brothers, 1937, p. 157.

² J. CROSBY CHAPMAN, *Trade Tests*, New York: Henry Holt & Company, Inc., 1921.

promptly. It was believed that some trade workers would do better on this test than on the former for the reason that pictures make it easier for them to recall the actual work of the trade than do the oral questions.

The third form of test used was an actual performance test. This consisted of having the candidate do certain typical jobs of the occupation, and grading him carefully on each part of the work done. For example, a man taking the test for truck driver was directed, among other things, to drive forward through an S-shaped curve, drive backward through the same curve, drive into a blind street on a hill and turn around without backing any more than necessary, and back up to a platform as if he were going to load his truck. Stakes 5 feet apart were placed on each side of the driveway and the number of stakes knocked over was taken into account in making up the driver's score. Other items taken into account were racing engine when starting or shifting, abrupt start, grinding of gears in shifting, jerky driving, unnecessary stopping of truck, more than one backing to reach platform, stalling engine, etc. To be sure, few occupations lend themselves as readily as truck driving to this form of test. In most skilled trades it is impossible to select a few jobs which can be completed in a reasonable length of time and which are so typical of the trade as a whole as to indicate general trade proficiency.

The practicability of occupational proficiency tests in the schools. The development and use of standardized objective tests of occupational proficiency suitable for use in rating those who pursue any kind of vocational preparatory training in public schools seems entirely practicable, even though little progress in this direction has yet been made. If necessary, much more time could be used in giving these tests under school conditions than was possible in the case of the army trade tests. Until recently the most serious difficulty has been that there was no agency which had the organization necessary to prepare the tests and the prestige necessary to bring about their general acceptance and use. With the organization of the U.S. Employment Service, this difficulty has been removed. The Division of Standards and Research of that service has been engaged for some time in preparing and standardizing oral trade questions for use in federal-state employment offices throughout the country. It is to be hoped that the same agency will extend its work to include

performance tests, also. Schools engaged in vocational education should find these tests very useful in the placement of their graduates.

However, it must not be forgotten that occupational proficiency tests measure only present proficiency. Taken alone, they give no indication of the candidate's possible improvement in the occupation in the future. The length of time he has spent in preparation for the occupation, his intelligence, any special aptitude he has shown, and such personal qualities as ambition, persistence, initiative, and carefulness should be taken into account in estimating the candidate's future possibilities in the occupation.

Achievements in other school activities. No picture of what a pupil has done is at all adequate without taking account of his so-called "extracurricular activities." Attention was given in a previous chapter to the value of these as means of aiding pupils to make an inventory of their own assets and liabilities. Here we are concerned with their value to the school in its counseling of pupils. What the pupil does in connection with his school but outside his studies is often more revealing of aptitudes, interests, and personality traits than his entire school program. In what kinds of activities has he participated: artistic, athletic, civic, dramatic, forensic, journalistic, literary, mechanical, musical, scientific, social? What type of work did he do? For example, if he took part in school plays was he actor, stage manager, or business manager? What was the general quality of his work in each activity that claimed his interest? What school offices has he held? Was he a leader or a follower? What other personality traits marked his participation? It is obvious that if such data are to be of greatest value in vocational counseling much better methods of collecting them and of assuring their reliability must be developed than are in vogue at present.

Achievements in out-of-school activities. What the pupil has done and is now doing in his home, in nonschool clubs and other organizations, and in activities of an individualistic type deserve consideration, also. Does the girl have home responsibilities such as caring for younger children, preparing meals, repairing clothing, keeping the house in order? Does she take private lessons in music, art, or dancing? Of what organizations is she now or has she been a member? What offices has she held?

What has she done through hobby activities? Does the boy have any regular chores at home? Does he have a workshop? What has he made outside the school shops? Has he a postage-stamp or other collection? What organization memberships and offices has he had? What kind of private instruction, if any, has he received? What work for wages, if any, has either boy or girl done? And, of course, whatever reliable information can be obtained concerning the quality of performance in the various activities is desirable. It is quite possible that a pupil who has done poorly in schoolwork has done something noteworthy outside of school that is quite significant for vocational guidance purposes.

DATA CONCERNING THE INDIVIDUAL'S EDUCATIONAL AND VOCATIONAL PLANS

Mention was made earlier of the need for knowing what plans parents cherish with reference to the education and future vocations of their children. It is even more important to know what the pupil himself is planning, and why, even though plans of pupil and parents agree. In case of the junior high school pupil, does he expect to enter senior high school? What curriculum does he expect to pursue? Has he thought seriously of any particular occupation that he would like to follow? If so, what is it? Why does he favor this occupation? What plan has he for obtaining the needed preparation? What other occupations, if any, interest him?

If the pupil is in the senior high school, similar information will be needed. But in this case new questions arise. Does the pupil expect to graduate from high school? Does he plan to go to work when he leaves high school, either before or at graduation? If so, what kind of work does he hope to do? Does he expect this to be permanent or temporary? What does he hope to do permanently? What preparation for this work is he planning to obtain while in high school? What are his plans for further preparation after leaving high school? If he expects to go to college, what type of college has he in mind? Why? What occupation does he expect to follow? What preparation does he plan to make for it and in what special or professional educational institution? If no occupation has been chosen, what ones are being considered? Other questions may need to be added to

the list. If a vocational counselor is to be genuinely helpful to a pupil he must be well informed concerning that pupil's ambitions and plans.

RECORDING THE DATA COLLECTED

Throughout the rather lengthy discussion of the Personal Data Collecting Service, reference has been made again and again to the value of this service in counseling and other guidance services. The effort throughout has been to ascertain what facts concerning the individual pupil are desirable and how these should be obtained in order that vocational counseling, placement, and follow-up may be effective. Obviously these facts must be recorded in readily accessible and understandable form if they are to serve the purpose for which they were assembled.

Procedure in preparing suitable record forms. Since there is no object in recording data that will not be used, the first step in preparing suitable record forms for any school system is to determine what facts can be used advantageously. This will differ in different school systems, according especially to the provision made for vocational guidance. For this reason the use of standard forms has not worked out very well, though many valuable suggestions, both as to items and arrangement, can be obtained from these forms. It is suggested that some such list of data as is given in this book under the discussions of general data, physical data, psychological data, social environment data, achievement data, and data concerning the individual's educational and vocational plans be checked through with care in the light of local conditions and such items be selected as local conditions and the proposed local program warrant. Items from forms used in other cities or items suggested by peculiar local needs may be added to the list if desired. A record of counseling interviews and of adjustments of the pupil's program should be included, also. In preparing this list it should be kept in mind that comprehensive data are absolutely essential to an adequate program of vocational guidance.

The next step is to arrange the form for the individual pupil's permanent cumulative record. This form may be printed on a card or on a folder. The tendency in recent years has been to regard the standard folder, 9 by 12 inches, as more satisfactory, and to have it planned for the four, six, or eight years of

the secondary school period. If a folder is used, the pupil's record from elementary school, which should be cumulative, is usually filed in it. Also, any correspondence with the pupil's parents, anecdotal material concerning the pupil sent in by teachers, and other information that is useful in understanding the pupil but does not need to be placed on the permanent record form would naturally find their way to this file.

A third step is to prepare blank forms for use in gathering from various sources the information that is to be placed on the permanent record form. Some of these will be forms for reports on groups of pupils—semester reports on the scholastic records of the various classes, reports on group tests of general intelligence, personality ratings on their groups of pupils by home-room or subject teachers, and the like. Other forms will provide for individual reports such as those on physical examinations, psychiatric examinations, and individual intelligence tests. Again, the number and kinds of forms will be determined by local conditions and by the nature and extent of the vocational guidance program.

The cumulative record folder of the American Council on Education. One of the most carefully planned and complete cumulative record forms for secondary schools is that prepared some years ago by the American Council on Education. This form is printed on both sides of a sheet of cardboard 11½ by 17½ inches, folded once to give four pages. The first three pages are reproduced on pp. 242-244. The fourth page, devoted to Notes, is not shown.

SUMMARY

Intelligence tests and special aptitude tests indicate better what one *can* do than what one *will* do. Drive, emotional stability, initiative, ambition, disposition, and other personality characteristics also are important items to be considered in choosing a vocation both because they indicate how effectively the individual will probably use whatever intelligence and aptitudes he possesses, and because occupations differ decidedly in respect to their personality requirements.

Efforts to measure personality traits by means of tests have covered such items as will-temperament, trustworthiness, neurotic tendency, self-sufficiency, introversion-extroversion, dominance-

[illegible]

[illegible]

submission, self-confidence, sociability, and others. Caution is necessary in using results of these tests. No doubt personality traits of many individuals are modified considerably with advancing years. The degree to which one gives evidence of a particular trait varies in different activities. More information is needed concerning the extent to which different occupations demand particular personality traits. More and better tests in this field are needed. The cost of time and money in giving and scoring the tests is an important item affecting their practicability for school use. It is probable that the *total personality pattern* of most individuals is relatively stable. Also personality requirements of different occupations will be determined more satisfactorily than at present. It seems quite possible that individual personality patterns, or profiles, will find at least as large a place as interest patterns in future vocational guidance programs.

At the present time rating scales are used much more widely than tests in measuring personality traits. Numerical, linear, and man-to-man rating scales are the most common types. Important precautions are that several persons who know the subject well should do the rating; raters should have as nearly as possible a common understanding of the traits involved; all individuals of the group concerned should be rated on the first trait, then all on the second, etc.; the list of traits should be relatively short and selected with great care. The rating of pupils by their fellows as well as by teachers is practiced in some schools. Self-ratings by the pupils, using the same scale used by the teachers and fellow pupils, is sometimes combined with the above. Though open to all of the weaknesses of subjective judgments, personality rating scales when proper precautions are observed will continue to be a valuable asset to the vocational counselor. He will wisely use them with discrimination and with due regard for all the other data available.

Needed social environment data includes information concerning the individual's home; his associations outside the home—his companions, the neighborhood and school organizations of which he is or has been a member, etc.; his recreations; the traveling he has done and the things that interested him most in his travels.

Among the principal items of achievement data that should be brought together for vocational guidance purposes are, of course,

the pupil's records in school subjects, with care exercised that these shall be as reliable as possible. Standardized subject and occupational proficiency tests improve the reliability of such records. However, it must be recognized that these tests at their best measure only present proficiency, not possibilities of improvement. Achievements in extracurricular activities and out-of-school activities, including any work that the individual has done also belong in the picture. The question to be answered by these data is: What has he done that may be significant in planning his vocation?

Finally, data are necessary concerning the individual's educational and vocational plans. How long does he expect to remain in the school he is now attending? What curriculum and what subjects does he expect to pursue? What kind of higher educational institution does he plan to enter and why? Has he chosen an occupation? If so, what is it and how does he expect to prepare for it? This is the type of question that calls for attention here.

Suitable record forms are, of course, necessary in order that all of the various kinds and items of data discussed in the last three chapters may be available for ready use in counseling. These forms, prepared in accordance with accepted principles, should fit the vocational guidance program of the particular school system in which they are used.

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CHAPTER XIII

THE VOCATIONAL COUNSELING SERVICE

The oldest service of vocational guidance in the school is vocational counseling. Wherever the relationship of teacher and pupil exists there is found a setting for questions and suggestions concerning the pupil's future occupation. Often throughout the history of organized education, this setting has resulted in the teacher's giving the pupil definite counsel as to his career. Especially has this been true in case of pupils in the period of adolescence. The head of the school even more than class teachers has felt called upon occasionally to give vocational counsel to individual pupils.

Counseling incidental and unscientific in the past. Nevertheless, comparatively few men and women today can trace their choices of occupation to the influence of a teacher's or principal's advice or help. On the one hand many, probably a great majority of those who make up the adult population of today, never were counseled in regard to vocational plans by teacher or principal. Only a pupil now and then, when conditions were favorable, has had this experience in past decades. Vocational counseling until very recently was quite unsystematic and unplanned. Moreover, such counseling was unscientific in character, often colored by prejudice, and nearly always based upon meager knowledge of occupations and of the qualities and special aptitudes of the one counseled. In fact, these conditions still prevail in most schools.

Efforts to make counseling a regular school function. In the last few years efforts have been made in many city school systems to organize vocational counseling in a more scientific manner. In all parts of the country will be found junior high schools, senior high schools, and four-year high schools in which one or more members of the staff are known as counselors or vocational counselors. A report on this subject for the year ending June 30, 1938, covering 23,032 public secondary schools from which the

U.S. Office of Education obtains data every two years, indicated that 2,286 persons were then devoting one-half or more of their time to counseling students in these schools. Only two states and the District of Columbia had no such counselor.¹ Since some schools employ two or more counselors, considerably fewer than 10 per cent of public secondary schools had staff members who devoted one-half or more of their time to counseling. In 1940 the American Youth Commission reported that "full-time counselors are now to be found in less than 6 per cent of all secondary schools."² It is true that in many cases the work done by part-time and full-time counselors does not yet deserve to be called scientific and the vocational interests of students are too often given slight attention, but progress in these directions has been made and an organization favorable to greater progress has been set up. Every year vocational counseling is extending and becoming more systematic and scientific in American schools.

The nature of counseling. Counseling implies a relationship between two individuals in which one gives a certain kind of assistance to the other. The term "group counseling" is sometimes used in the literature of vocational guidance. These two words do not belong together. One might as well speak of "group courting" or "group diagnosis" as of "group counseling." In a counseling situation only two persons are involved, the counselor and the one counseled, sometimes called the "counselee." When more than these two participate in what takes place, the process is something else than counseling; perhaps group guidance such as occurs in a discussion of an occupation in the presence of a group consisting of persons interested in that occupation. This characteristic of counseling is well stated by Wrenn when he says,

First of all, counseling is personal. It cannot be performed with a group. "Group counseling" is an anomaly; the two terms are not in harmony. "Personal counseling" is a tautology; counseling is always personal.³

¹ ROYCE E. BREWSTER and WALTER J. GREENLEAF, "A Roll Call of Counselors," *Occupations: The Vocational Guidance Magazine*, XVIII (November, 1939), 83-89.

² *The Occupational Adjustment of Youth*, p. 5, Washington: American Youth Commission of the American Council on Education, 1940.

³ C. GILBERT WRENN, "Counseling with Students," *Guidance in Educational Institutions*, Thirty-seventh Yearbook, National Society for the Study

The assistance given by the vocational counselor to the one counseled consists of help in marshaling the facts that should be considered and in weighing and evaluating these facts in relation to the counselee's vocational plans. It is at once apparent that the facts to be considered are of two kinds, those pertaining to the assets and liabilities of the individual, as discussed in Chaps. IX, X, XI, and XII, and those pertaining to the opportunities and requirements of the occupations that interest this individual, as discussed in Chap. VIII. It is equally apparent that most individuals, especially when still in the period of adolescence, need help not only in marshaling the pertinent facts of these two kinds but also in seeing their significance for vocational plans, whether in confirming plans already made or in formulating new ones. Vocational counseling does not function effectively unless the latter of these two services as well as the former is performed in a proper way.

In this connection it is well to note that vocational counseling is not giving vocational advice. Someone facetiously has said that the worst vice is advice. Whether or not this be true, it is certain that giving advice is not a part of wise counseling, though one of the most common weaknesses of vocational counselors. Nor is vocational counseling telling an individual what occupation he should follow, after having noted his personal assets and liabilities and having compared these with occupational requirements. Phrenologists, physiognomists, and unfortunately, some overcredulous believers in psychological tests often try to tell people what they should do. But this is not vocational counseling. Vocational counseling leaves decisions to the counseled individual. Its duty is performed when it helps this individual to follow a wise procedure in arriving at his own decisions, not when it tries to make decisions for him. Counseling is no more making decisions for the counselee than is the teaching of algebra solving problems for the one taught.

The place of counseling in a vocational guidance program. From what has been said concerning the nature of counseling it is clear that this service constitutes the heart of the vocational guidance program. All the services discussed thus far are

brought to a focus in the counseling interviews. Services yet to be considered in detail—vocational preparation, placement, and adjustment in employment—stem from the decisions reached or confirmed by counseling. It should not be inferred, however, that this lessens in any degree the importance of the other services. Unless the occupational information, self-inventory, and personal data collecting services are performed well, the most effective counseling service is impossible. And unless provision is made for suitable vocational preparation, placement, and follow-up much of the value of the counseling service is lost.

The counseling program required for all pupils. In order that a program of vocational counseling in a high school may be comprehensive, it must reach all pupils in the school. It is not sufficient to make the counselor's services available to all who wish to consult him. It is necessary to require that all come to him for individual interviews just as they are required to take English or history. In the case of some pupils, a single interview may be all that is necessary during the entire junior or senior high school period. The vocational choices of these may appear to the counselor entirely suitable, their plans for preparation wisely made, and their progress satisfactory. Even these pupils, however, are entitled to the services of the school's specialist in vocational counseling long enough to find out whether choice and plans and progress are, or appear to be, suitable.

In the case of other pupils who have made no choices or whose choices appear unwise, several counseling interviews may be necessary. Most pupils will need at least two interviews with the counselor during the junior high school period, one during the first year as they are choosing their curriculum, and another during the last year as they look forward to senior high school or, in a few cases, to employment. In the senior high school, as problems of future occupation and preparation for it become more pressing, more frequent conferences with the vocational counselor may be needed by most pupils.

Scheduling individual interviews. It is apparent that a counselor who is to do so much interviewing of individual pupils will find it necessary to make out a schedule of appointments in advance, with a maximum time for each interview, and arrange for pupils to see him according to this schedule. Naturally the interviews, if possible, would be scheduled when pupils have

study periods or at other times when interference with classwork would be least serious. But a counselor should have the privilege of scheduling appointments with pupils at times when they are due in English or mathematics or any other subject if necessary, notifying the teacher of the arrangement in advance. The counselor's position in the school and his relations with teachers should make this possible without friction. A 30-minute maximum should be adequate for interviews, and some counselors may prefer less time than this. If the full time is not required, the remainder may be spent in recording important items that come out of the interview or in preparing for the next interview. In case an interview is not completed within a half hour, arrangements can be made to continue it later. Provision should be made by the counselor for voluntary interviews with pupils during the first hour after school each day and at other times.

The setting of the interview. It is important that the counseling interview shall have a setting that will give the pupil who comes for his first interview a favorable impression. This calls for a private office in which the counselor may talk with a pupil without interruption. It calls for an office that is orderly, well kept, and businesslike in appearance, with the needed records readily accessible and for a cordial and friendly but businesslike attitude on the part of the counselor. Expecting a counselor to do other than merely incidental counseling when in charge of a home room or study hall and in the presence of other pupils is expecting the impossible, though some schools still provide no better setting for this important confidential service. The attitude of the pupil toward the counseling interview is, in fact, a part of its setting. If the school does not respect this interview sufficiently to provide favorable conditions for it, the pupil will approach it with an attitude of indifference or distrust. If the principal and teachers believe in this work and are sympathetic toward it, recognizing that it is a school enterprise for which they as well as the counselor are responsible, pupils generally will look upon it with respect and confidence and will approach it with a favorable attitude.

Preparing for the interview. The wise counselor will, of course, make special preparation in advance for each scheduled interview by looking up all the pertinent information available concerning the pupil who is scheduled to see him. This informa-

tion should be in the cumulative record files of his office in some such form as described on pages 240-244, Chap. XII. The records would include data discussed in detail in Chaps. X, XI, and XII. In the case of some pupils there will be reports from local government or social agencies that have aided the family, or from a psychiatrist who has had occasion to examine the pupil, or from a probation officer who is looking after him by order of the court, in addition to the more usual information coming directly from the school or the home. Other things being equal, the greater the amount of pertinent information the counselor has in mind concerning the pupil, the more successful will be the interview, both in obtaining further significant information and in directing wisely the pupil's thinking on occupational plans.

The counselor will find it desirable also to select in advance from the available data a few leading items for use in the interview, both in starting it and in focusing it upon the individual pupil's most urgent needs. The counselor is no more justified in beginning a scheduled counseling interview without adequate special preparation for that particular interview than is a teacher of physics or history in starting a class period without special preparation for the work of that period.

Conducting the interview. If it is a first interview, the first objectives will be to make the pupil feel at ease, to disarm any prejudices he may have against the counselor's office, and to gain his confidence. In order to accomplish these objectives the counselor will need to make wise use of what he has learned from examination of the records concerning the pupil's special interests and hobbies. The procedure involved is very similar to that used in interviews by the better news reporters. This was ably described some years ago by Isaac Marcossou, the famous war correspondent, in the following language:

Every man is a law unto himself. There are no two human beings alike in the world. Before interviewing a man, you should learn all about him that you can. The more you analyze the process of interviewing the more marked becomes the parallel with salesmanship. Men often fail in business because they use the same arguments with everybody. They forget that each human being is a law unto himself. It would have been impossible to get next to Lloyd George with the same line of selling talk that you employed to make Sir Douglas Haig break his chronic silence. Each of these remarkable men—and they

are types—required an entirely different line of approach, based upon a knowledge of their work, interests, ambition, and personality.

Ever since those early days I have invariably made it a point to find out all I possibly could about a man before I went to see him. Before the war if I knew nothing about a man's particular hobby or interest I made it my business to find out something about it—whether it was horses, yachts, good roads, landscape gardening, first editions, etchings, or baseball.

Having gained the pupil's confidence, the counselor could easily inquire about his plans for the next year, for the rest of his high school course, and after his high school work is over. This would naturally lead to questions concerning the pupil's choice of occupation; whether he has made a choice, why he thinks it suitable, and what preparation he is planning to make for it. If no choice has been made, the conversation might be directed toward a few occupations that have aroused the pupil's interest. Whatever occupation is discussed should be considered in relation to the pupil's health, physique, temperament, general intelligence, general school record, record in tryout experiences, achievements in extracurricular activities, and the like. Suggested references which deal with an occupation in which he is interested may be given to the pupil, and arrangements may be made for him to talk with someone who has succeeded in the occupation under consideration. Of course, attention should be given to his plans for further education.

The pupil may be asked to fill out a self-analysis blank, such as was discussed in a previous chapter, which will give his own estimate of himself with respect to certain important qualities. If conditions seem to justify it, attention may be given in a considerate manner to remediable personality handicaps and methods of overcoming them. In fact, the counseling interview affords an opportunity to discuss with the pupil any of his personal assets and liabilities that seem likely to affect his educational and vocational plans and to direct his thinking toward increasing his assets and decreasing his liabilities in any way possible.

Closing the interview. As the counselor brings the interview to a close, he should sum up with the pupil the situation as it stands. If the situation warrants it, he will make some concrete suggestions as to what the pupil should do in order to gain additional information or experience which will aid him in making his

choice or in preparing himself if a suitable choice is already made. He may find it desirable to stress the fact that a suitable choice is much more important than an immediate choice and to advise delay in reaching a decision until more evidence is available or until the evidence is more carefully studied. In some cases he may wish to schedule another interview at some date in the near future. He will call the pupil's attention to his afterschool office hour when any pupil who wishes may come in and see him about vocational problems.

The pupil should go from the interview with a feeling that choosing his occupation is a serious undertaking and that the responsibility for whatever choice is made must rest with him. He should also carry away with him a profound belief that the counselor is genuinely interested in helping him to make a wise choice and is able to give him valuable assistance in the matter.

Recording the interview. In making a record of the interview, part of which may be entered while talking with the pupil if this does not interfere with the success of the interview, and part after he leaves the office, the counselor will check the accuracy of information already on file concerning the pupil and will supplement this with additional information called for on the record blank to which references have already been made. He may wish to add a few brief memoranda of things about the pupil that impress him as significant, though he will need to guard against placing too great value upon hastily formed impressions. The self-analysis made by the pupil, while constituting a part of his record in the counselor's office, may well be filed separately from the record blank and be accessible only to the counselor. It should be treated as a confidential statement of the pupil and therefore protected from examination by teachers, who may at times have access to the record blanks referred to above. Both record blank and self-analysis will be referred to by the counselor in connection with later interviews and with placement when the pupil leaves school to enter a wage-earning occupation.

Later counseling interviews. The general principles which govern the first counseling interview are applicable in later formal interviews also. The same consideration, the same respect for the personality of the pupil, and the same care in examining and weighing significant data are essential. But, because of the relations already established between counselor

and pupil, and the better understanding of the problem on the part of both, more rapid progress can usually be made toward fairly definite plans or toward solution of new problems that have arisen. Of course, a record of each such interview should be made, no matter how many may take place. Sometimes opportunities will arise for the counselor to talk quite informally with a pupil whom he has previously met in a counseling interview. Very effective counseling may result from these informal conversations, if the counselor is good at recalling what was said and done in the more formal occasions of their meeting.

Vocational counseling by others than a trained counselor. It has been noted that one function of vocational counseling is to help the individual marshal significant facts concerning occupations that interest him; a second function is to help the individual marshal significant facts concerning himself; while a third is to help him evaluate and interpret these two sets of facts in relation to each other.

A vocational counselor will often find it desirable to refer a pupil to another teacher or to some industrial, business, professional, or other type of worker for assistance in the performance of the first of these functions. As noted earlier, no other staff member of a senior high school should know as much about opportunities and requirements of occupations in which chemistry is basic as the teacher of chemistry. Nor should any be so familiar with occupations in the electrical field as the teacher of electricity, whether this is taught as a separate subject or as a part of physics. It is to be expected that the counselor will say to a boy who is interested in industrial chemistry, "Talk with Mr. K., who teaches chemistry, about the opportunities and requirements of that field," or to one who is considering servicing radios, "Talk with Mr. L., who is our school's specialist in the electrical field, about what is involved in servicing radios." The counselor might also send the first boy to a carefully selected chemical engineer and the second one to a leader in the business of servicing radios. It is expected in each case that assistance will be given the boy in obtaining facts concerning the occupation involved.

It must be understood, however, that little if any help can be expected from the latter sources in the performance of the second and third functions of the counseling service. Neither the

teacher of chemistry nor the chemical engineer has the needed data concerning the boy and neither is likely to have the required training for helping the boy to evaluate the data concerning industrial chemistry in relation to the data concerning himself.

In other cases the counselor may send a pupil to a physician who will help him to form a correct idea of the seriousness of some physical handicap or to a psychiatrist for information concerning an emotional disturbance. But these two professional workers are simply helping individual pupils to obtain certain needed facts concerning themselves, and supplying the counselor with these same facts. They are not expected to be of direct assistance in performing either the first or third functions of the counseling service. Indeed, they deal with only a small part of the needed facts included under the second function.

Responsibility for making sure that the pupil actually organizes both groups of facts in an adequate manner, and for helping him to interpret and evaluate these two groups of facts in their relation to each other still rests, and must rest, with the vocational counselor. This is a specialist's job, and he is the specialist employed to perform it.

The "teacher-counselor" in relation to vocational counseling. Jones and Hand treat the "teacher-counselor" as the key person in a guidance program. The presentation of their point of view follows:

Each school would be so organized and so administered that it would be possible for one well qualified person to have intimate and continuous contacts over a series of years with a given group of say, from thirty to forty students. These teacher-counselors would serve in the composite capacity of guide, instructor, and director of instruction for their respective groups with reference to the core or common experiences afforded by the school; in addition, the special interests and needs of various groups of students (*e.g.*, for higher mathematics, technical science, etc.) would be met in specialized courses taught by specialized teachers outside of, or beyond, these core experiences. These teacher-counselors should of course be specially qualified and given sufficient time and adequate facilities to do their work effectively. Each would be assisted in discharging the inseparable functions of guidance and instruction for a given group of students by a "team" of teachers representing respectively the various broad fields of interest and endeavor (social studies, science, language arts, practical arts, etc.) with which a functional curriculum would be concerned. A given "team-member

teacher" would of course work with more than one teacher-counselor, and hence with more than one group of thirty to forty students. Also, a given teacher-counselor might serve for a portion of the day as a "team-member teacher" representing some one or more broad fields under some one or more other teacher-counselors.

The major responsibility for the diagnosing and the counseling, as well as for the instructing, of the students in question would thus fall to the adequately trained teacher-counselor aided by his cooperating "team." In addition, there would be available specialized services of a more expert nature in connection with every aspect of the work. The primary role of these specialized workers, however, would be that of a teacher of teacher-counselors and teachers, and of consultant. All the diagnosing and counseling done by these specialists would definitely and intimately be coordinated with that performed by the teacher-counselor and his team of teachers.¹

This proposal does not differ greatly from that of placing chief responsibility for counseling on well-trained home-room teachers who, as far as possible, keep the same pupils throughout their stay in junior or senior high school. That there are important educational advantages in this arrangement cannot be questioned, though there are often educational disadvantages also. It is obvious, too, that such teacher-counselors or home-room teachers must be expected to make important contributions to the vocational counseling program as will be discussed in Chap. XVIII. But it cannot be expected that adequate vocational counseling will be done by these individuals, along with their teaching and other duties.

The specialist in vocational counseling will be needed also, and his duties will consist to a greater extent in conducting interviews with individual pupils than in serving as a "teacher of teacher-counselors and teachers," and as "consultant." In fact, the Jones and Hand discussion seems to be concerned with *individualized teaching* rather than with counseling, or, at any rate, vocational counseling. Vocational counseling is too highly specialized an undertaking to expect that in a school of 1,000 pupils approximately 30 members of its staff will be qualified to perform this task effectively, even with a specialist as consultant.

¹ ARTHUR J. JONES and HAROLD C. HAND, "Guidance and Purposive Living," *Guidance in Educational Institutions*, Thirty-seventh Yearbook, National Society for the Study of Education, Part I, Chap. I, pp. 27-28, Bloomington, Ill.: Public School Publishing Company, 1938.

Other duties of the vocational counselor. In addition to his work in connection with conducting counseling interviews with individual pupils, the vocational counselor in a secondary school will perform many other important duties.

He will meet with pupils in groups from time to time, explaining the nature and vocational implications of curriculums and schools open to them; acquainting them with the services provided by the counselor's office, pointing out the steps necessary in order to obtain an employment permit or an age certificate and calling attention to the laws affecting young workers; supplying information on a group basis concerning any specific occupation in which the particular group may be interested; and possibly teaching one or more classes in occupational information.

He will confer with teachers and other fellow members of the school staff in order to obtain information concerning individual pupils; in order to enlist cooperation in meeting the needs of a particular pupil for educational or vocational adjustment; in order to enlist the cooperation of the subject teacher in acquainting his classes with information concerning the opportunities and requirements of occupations for which his particular subject is basic; in order to encourage more attention by subject teachers to the exploratory values of their work and to secure from them more complete reports concerning pupils' interests and characteristics revealed by these exploratory experiences; in order to ensure better school library facilities for vocational guidance purposes.

He will confer with the research bureau or psychological clinic of the school system with reference to giving intelligence, aptitude, and achievement tests in particular instances and reporting upon test results; with the attendance department concerning attendance records and visits of attendance officers and visiting teachers to homes of pupils; with the school health department concerning health examinations of particular pupils and the findings of such examinations; with the office which places youth in employment concerning the placement of pupils who are about to leave school and concerning the success of these pupils after they have been in employment for a time.

He will confer with parents in order to acquaint them with the school's efforts to help their children make wise educational and vocational plans; in order to obtain additional information

needed in interviews with pupils; in order that there may be agreement and cooperation between school and home in the help given pupils in making their plans.

He will work with representatives of industry, business, and the professions in gathering information concerning occupations for use in the schools; in arranging for occasional talks by successful workers in different occupations to groups of interested pupils; in arranging for individual boys and girls to interview workers engaged in occupations which the boys and girls are thinking of entering; in arranging for groups of pupils to visit industrial and business establishments.

He will work with social agencies of the community outside the school system, such as Boy Scout and Girl Scout organizations, Y.M.C.A. and Y.W.C.A., men's and women's service clubs, parent-teacher associations, juvenile court, welfare organizations, C.C.C. camps, and N.Y.A. in ways that will keep these organizations informed concerning the school's counseling program; gain needed information concerning particular pupils; obtain information concerning the guidance activities of these various organizations and the relation of their activities to the work of the school; bring about a closer coordination of guidance effort in the community; focus the efforts of other agencies with those of the school upon difficult cases.

He will concern himself with school records in order that the data on file in his office for each pupil may be as useful as possible in counseling interviews.

In engaging in these varied activities, however, the vocational counselor will do well to keep in mind the fact that their purpose is to make more effective his and his helpers' counseling interviews with individual pupils and to promote the vocational guidance program as a whole, of which counseling is so vital a part. The nature of counseling is such that the individual interview must be considered the heart of the counselor's work.

Qualifications of the vocational counselor. Again and again the vocational counselor has been referred to as a specialist. The qualifications of a specialist in any field include (1) personality traits particularly suited to the field, (2) training for the work to be done, and (3) experience related to the field.

An interesting preliminary study of traits of vocational counselors as judged by high school principals and directors of guid-

ance was reported some years ago by Walter B. Jones. The five traits emphasized in this study are

1. *Breadth of interest.* This trait is characterized by such trait actions as: (1) Able to get the business point of view. (2) Sympathetic with prospective drop-outs as well as with college preparatory pupils. (3) Interested in various types of people. (4) Addresses clubs and various organizations. (5) Has interest in pupil's home and school life.

2. *Cooperation.* Cooperation is characterized by such trait actions as: (1) Does extra work occasionally in a cheerful manner. (2) Cooperates with employers in trying to see their side of employment problems. (3) "Spends and is spent" for mankind.

3. *Refinement.* Refinement, in which modesty is an outstanding subtrait, is characterized by such trait actions as: (1) Is not affected, dominating, or dictatorial. (2) Is not too cock-sure of the wisdom of his own judgment.

4. *Magnetism.* Magnetism is characterized by such trait actions as: (1) Puts others at ease. (2) Inspires confidence at interview. (3) Makes pupils feel that they are always welcome to see him and that they will be given help.

5. *Considerateness.* This trait is characterized by: (1) Appreciates teacher's difficulties in working out student adjustments. (2) Exhibits human understanding of those less fortunate. (3) Has real love for fellowman without being sentimental.¹

While a more complete study might modify the above list in some respects, this gives a good general picture of the type of person who is suited to the work of a vocational counselor when the needed training and experience, and the maturity that comes with these, are added.

In the matter of preparation for vocational counseling, it is generally agreed that a good liberal education is a first essential. Because of the nature of the work to be done, this should include considerable attention to economics, psychology, and sociology. Since vocational counseling is to be carried on in a school system, it is important that the counselor shall understand the more fundamental principles that underlie education; be acquainted with its organization and administration; be familiar with the objectives, curriculums, and methods of secondary schools, and know the principles of vocational education and the varied

¹ WALTER B. JONES, "Traits of Vocational Counselors," *The Vocational Guidance Magazine*, IX (May, 1931), 348-353.

opportunities, public and private, available for obtaining preparation for occupations. Included in the special preparation recommended by a committee of the National Vocational Guidance Association are: principles and problems of vocational guidance, analysis of vocational activities, methods of imparting occupational information, psychological tests in guidance, counseling the individual, placement and follow-up, and field work in vocational guidance. Others have added to this list courses in individual differences, mental hygiene of adolescence, and psychiatry. When account is taken of the varied duties and relationships of the vocational counselor the tendency is to expand rather than to reduce this suggested program of preparation. With growing recognition of the highly specialized professional nature of the work, it seems likely that preparation for it will be extended.

As regards experience needed by one who is to do vocational counseling, an excellent statement is found in the certification requirements for counselors set up by the New York State Department of Education:

Experience. The range of occupational experience is so great that no person may have all the desirable kinds. It is desirable that the counselor have experience in the school grades or type of school in which he expects to counsel. Since the greater number of our young people leave school at an early age and enter factory and commercial occupations, experience in these occupations will be valuable. Other experiences directly related to guidance problems are: social case work; visiting teacher service; participating in local surveys and report writing under direction; administrative work in the school grades in which the person expects to work; personnel work in large industrial or commercial establishments.

Candidates must have satisfactory evidence of three years of approved experience. This experience must include teaching and such other experience as will enable the counselor to appreciate by contact the problems of young people both in school and in employment. The following kinds of experience are particularly valuable:

- a. Industrial, commercial, and professional, exclusive of teaching but inclusive of personnel work.
- b. Classroom, shop, or laboratory teaching or administrative work in the school grades in which the counselor expects to work. (This does not include student teaching.)
- c. Social case work for social agencies and visiting teacher service.

d. Participation in local surveys and report writing under direction, or in laboratory case work and reports on problems related to guidance.

Relation of the vocational counselor to discipline and administration. It must be granted that the list of duties of a vocational counselor presented in this chapter is formidable. However, all these duties relate rather definitely to his central activity—helping the pupil marshal and evaluate facts that are significant for his vocational plans. Unfortunately vocational counselors are often required to spend much of their time on work that is quite foreign to counseling. In studying the actual work performed by counselors in various cities a few years ago, the writer found them handling discipline cases; dealing with absence and tardiness; granting permission to leave school at irregular times or to come late on account of illness, to go to the dental clinic, etc.; granting lunch permits; having charge of all school-assembly programs; supervising school clubs and the school social program, including dances; providing free books, supplies, and other special aid for needy pupils; presiding over study halls; lending money from the school loan fund and checking on repayment of loans; supervising school publications; performing corridor duty; and other similar duties.

It appears that, under the guise of setting up a counseling program, some secondary school principals have unloaded a large number of their office duties upon the counselor. True, the counselor is a member of the school's staff and should be expected to take part in the general work of the school. But it is unfair to him and to the work of counseling to take his time from work related to counseling when there is more than enough of this to keep him busy, in order to do disciplinary, clerical, and other work essential to the administration of the school but remote from counseling.

As a matter of fact, the counseling function and the disciplinary function sometimes conflict. When a counselor disciplines a pupil that pupil may develop an attitude toward the counselor that makes impossible for the future the friendly relationship essential to effective counseling. The writer when visiting a large high school a few years ago asked to see a certain counselor. The reply was, "I'm sorry, but you can't see him today. He had a disciplinary case this forenoon and the boy blacked his eye." While this is an extreme case, it illustrates

the point. That man's value for vocational counseling was gone not only for the boy concerned but for many other boys in the school. Possibly the counselor's disciplinary methods were unwise, but disciplinary cases often leave bad feeling however well they are handled. A disciplinary situation usually calls for different treatment than a counseling situation. In general, different personality traits and different preparation are needed for counseling than are usually found in disciplinary officers.

The vocational counselor as coordinator of the vocational guidance program. In a later chapter attention will be given to the organization and administration of a comprehensive program of vocational guidance in a city school system and to the place of superintendent, principal, vocational counselor, home-room teacher, subject teacher, and others in this program. However, in closing this chapter it seems fitting to stress the coordinating function of the counselor in the vocational guidance activities of any particular school.

His should be the responsibility for planning the program, in cooperation with his principal and the city director of vocational guidance. He should suggest ways in which other members of the school staff may cooperate in the program, and obtain their cooperation. As his school's specialist in this field he should be looked to for leadership in bringing together all of the possible contributions of the school to the vocational guidance of its pupils. If the school is large, with several counselors, the coordinating responsibility becomes that of the group, usually under the leadership of one member, who serves as chairman. If the school is small, with a single counselor who can devote only a fraction of his time to vocational guidance, the coordinating function is still his. The wise principal will recognize the desirability of thus centralizing responsibility for this important work and will see that the necessary authority accompanies the responsibility, at the same time that he selects a well-qualified person for the position.

SUMMARY

Vocational counseling, long a feature of school work on an incidental and unscientific basis, is each year extending and becoming more systematic and scientific.

Counseling implies a confidential relationship between two individuals. The vocational counselor assists the one counseled to marshal pertinent facts and to evaluate them in relation to the latter's vocational plans. These facts pertain to the assets and liabilities of the counseled and to the opportunities and requirements of occupations which interest him. Vocational counseling is neither giving advice nor telling the counseled individual what occupation he should follow. The individual is left to make his own decisions. The counseling service is the heart of a vocational guidance program. In a very real sense the occupational information, self-inventory, and personal data services lead up to counseling, and the vocational preparatory, placement, and follow-up services stem from it.

The counseling service should reach all pupils at least twice in both their junior and senior high school periods. Many pupils will require additional special interviews. The counselor needs to schedule these interviews with individual pupils and make as careful preparation for them as is done in case of class periods of regular school subjects. Preparation consists chiefly of studying the pupil's cumulative record, selecting items for consideration, and planning the interview with reference to the personality and needs of the pupil.

After the pupil has been put at ease, the interview centers around his vocational plans. What vocation, if any, he has chosen; what his strong and weak points are; what prospects he has for continuing his education; how his assets, liabilities, and plans harmonize with his vocational choice; what further information he needs and how he can obtain it are among the principal items which will claim attention. Sometimes the counselor will find it wise to refer the pupil to some other teacher or to some worker in an occupation that interests him for assistance in obtaining needed additional information. But responsibility for helping the pupil marshal and evaluate the information obtained remains with the counselor. The successful counseling interview is so conducted that the pupil leaves it feeling that choosing a vocation is a serious undertaking for which the responsibility rests with him and that the counselor is ready and able to give him further help later in this matter. The counselor will then make such additional entries on the pupil's record forms as seem justified and desirable. Often he will be able to supplement the

work of the formal interview by informal conversations at other times as opportunity offers.

In addition to conducting interviews with individual pupils the vocational counselor will meet with groups of pupils for various guidance purposes and confer with fellow staff members with a view to improving the guidance program of his school. Also, conferences with parents, with officers of the psychological clinic and other departments of the school system, with representatives of industry and business, with heads of social agencies, etc., will be necessary. But the individual interview is the heart of his work.

Among the personal qualities desired in a vocational counselor are breadth of interest, cooperation, refinement, magnetism, and considerateness. Broad preparation in the fields of economics, sociology, and psychology are considered important besides special preparation in education and in the various aspects of vocational guidance. Experience in industry, business, or social work is a decided asset.

The vocational counselor should not be called upon to spend his time on matters of general school administration or discipline. These functions do not harmonize well with counseling. However, he may be expected to serve as a coordinator of the vocational guidance program of his school and in some cases to teach as well as to counsel pupils.

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work of the formal interview by informal conversations at other times as opportunity offers.

In addition to conducting interviews with individual pupils the vocational counselor will meet with groups of pupils for various guidance purposes and confer with fellow staff members with a view to improving the guidance program of his school. Also, conferences with parents, with officers of the psychological clinic and other departments of the school system, with representatives of industry and business, with heads of social agencies, etc., will be necessary. But the individual interview is the heart of his work.

Among the personal qualities desired in a vocational counselor are breadth of interest, cooperation, refinement, magnetism, and considerateness. Broad preparation in the fields of economics, sociology, and psychology are considered important besides special preparation in education and in the various aspects of vocational guidance. Experience in industry, business, or social work is a decided asset.

The vocational counselor should not be called upon to spend his time on matters of general school administration or discipline. These functions do not harmonize well with counseling. However, he may be expected to serve as a coordinator of the vocational guidance program of his school and in some cases to teach as well as to counsel pupils.

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CHAPTER XIV

THE VOCATIONAL PREPARATORY SERVICE

Relation of vocational preparation to a comprehensive program of vocational guidance. In the process of transfer from school to occupational success, preparation for the occupation must, of course, take place somewhere along the line. In many occupations, both business and industrial, this takes place after employment begins. In others, preparation to a greater or less extent is made in the school or under school supervision before entrance upon regular full-time employment occurs. In still other occupations, a long period of highly specialized preparation precedes actual entrance upon the duties of the occupation, as in case of the professions.

In any case it is clear that the individual's vocational success depends upon the quality and completeness of his preparation as well as upon suitable choice of an occupation. Assisting the individual to secure his vocational preparation, wherever and whenever it may be obtained, is, therefore, of concern in considering a program of vocational guidance whether or not it is considered a part of that program.¹ However, this subject must be treated briefly here, the reader being referred for a more complete discussion to books devoted wholly to vocational education.

It has already been noted that the vocational counselor should assist pupils who have made definite occupational choices to plan their vocational preparation. Having been aided in choosing their work by means of information courses, tryout experiences, and individual counseling, these pupils are now ready for help in planning their preparation, whether this is to be obtained in the school system or outside it, and whether specific preparation should begin at once or be postponed until later. This is essentially a function of the counseling service. But a school system which undertakes to carry on a comprehensive program

¹ For further discussion of the relation between vocational education and vocational guidance see Chap. I, pp. 7-9.

of vocational guidance will be obliged to concern itself also with actually providing some vocational preparation as well as with helping individuals to plan such preparation as meets their particular requirements. What claims attention in this chapter is the school system's part in providing the needed preparation. The question for consideration is: What provision for vocational preparation should be made by a school system which undertakes to develop a comprehensive program of vocational guidance?

Vocational preparation however obtained a charge upon society. Throughout the discussion of this subject it is well to keep in mind the fact that, however vocational preparation is obtained by an individual, in the long run society as a whole pays the bill, or most of it. If one prepares in a state educational institution for a profession, the public at once assumes a part of the cost in taxes for support of the institution. The individual, to be sure, pays heavily for the time being in loss of earnings during his training period and in the price of tuition, books, etc. But when one enters upon this special training, the assumption is that society later will more than repay him in larger earnings over a long period of years than he would otherwise receive.

If the individual is prepared or partially prepared by the public school system for a trade or for an office position, the same thing is true. If the training is obtained in a private institution conducted for profit, such as a business college, then the entire cost is borne at first by the individual, and the cost to society goes over into the deferred payments column. Again, if the training is obtained wholly in employment, its first cost is shared by the learner, in that his wages are lower during the learning period, and by the employer, in that more supervision is necessary, a larger waste of material occurs, there is heavier damage to equipment, etc., during a worker's learning period than later. But the employer passes on his share to the public without delay in higher prices for his products or service, while the learner is reimbursed later in the wages of a trained worker.¹

¹ Eaton has phrased well the general point of view expressed in this paragraph: "There are those whose understanding of economic law is such that they believe it possible to saddle the cost of a new school building, a new highway, or a war upon posterity by the issuance of bonds. It is the same naïve conception that leads to the belief that society can somehow escape the cost of vocational education by turning it over to industry. By allowing

Vocational education a public responsibility. Nor is the fact that the public finally pays for vocational education, however it is obtained by the individual, all that needs to be noted here. Public responsibility for vocational education must be recognized and assumed if America's accepted belief in equal educational opportunity for all is to be a reality. The idea that a community maintaining a high school which offers a single academic curriculum provides equal educational opportunity for all youth in the community was exploded long ago. What this type of school provides is, of course, the same opportunity for all, regardless of individual abilities, needs, and possibilities of profiting from the school's offerings. The situation was much improved when the commercial, homemaking, and industrial arts curriculums and a more varied general curriculum were added to the earlier curriculum of academic type. But school authorities are coming to recognize that city school systems must go still further and undertake to help youth to obtain preparation in some way for the varied occupations which they enter, if equal opportunities are to be a reality. Helping one to prepare at public expense for college and doing little or nothing toward helping another to prepare for secretarial work or for the work of watch repairing is not observing the spirit of America's favorite educational slogan.

This public responsibility for vocational education extends through the same levels as for general education. That is, if a general high school course is maintained, then vocational preparation of high school grade should be provided. If a junior college is developed, then the city should be ready to provide preparation for occupations for which as much as two years of

industry, instead of government, to expend a part of the social income for the extension of vocational education it is in some mysterious fashion not spent, but saved. The economist, however, does not see it in that way. If it is spent it is spent and society pays the bill. If, however, the public pays through industry it has no control or direction of expenditure. If it pays through taxes to government it may determine the purposes and activities of vocational education with reference to the forwarding of democracy. Assuming the soundness of the proposition that government plus industry can support vocational education it follows that government alone can do so. It appears to the advantage of democracy that it should undertake that support." THEODORE H. EATON, *Education and Vocations*, p. 281, New York: John Wiley & Sons, Inc., 1926.

work beyond high school are needed. Always, of course, whatever is offered should be determined only after a careful survey is made of the vocational education needs of the community. But there is no more obligation resting upon the community to provide general education on a certain level than to provide vocational education on the same level. Indeed, the one who wishes the latter on the junior college level and is prepared to profit by it is quite as justified in demanding such education of the school system as the one who wishes the former is justified in demanding general education on the junior college level.

If conditions do not warrant the establishment of a class with teachers and equipment, the school system may at least arrange for correspondence study under its supervision or may offer to pay the tuition fees for the desired course in some neighboring city, or may arrange for instruction by a skilled worker in his place of employment. The school system thus becomes, as it ought, the agency of the community through which vocational education of a certain grade or level, as well as general education of the same grade or level, is made available to those who wish it.

Modern industry and business not organized to provide vocational preparation. The theory advanced by some writers that industry and business should train their own workers, since they reap the advantages derived from the training, needs further examination. As a matter of fact, society as a whole and the workers themselves as well as the employers reap these advantages, as has already been observed. All benefit together from proper preparation of workers. But more fundamental to this discussion is the fact that *industry and business are organized to do production and service jobs while preparation of workers is an educational job.*

When a foreman or a skilled workman takes time from his work to teach a learner, production usually suffers immediately; and it is for production that these men are paid. It may be argued that in the long run production does not suffer but is benefited because of greater efficiency on the part of the learner. But modern competition makes pressure for immediate production so strong that neither foreman nor skilled workman can take time to do a good job of teaching, even if qualified to do it. Here again, the fact that their job is production and their training and experience are along this line leaves them without the needed

qualifications for the educational job of teaching learners. Again, it often happens that efficient production requires a learner to keep on doing for weeks something that he has already learned to do well when efficient training would require that he be transferred to something new. In other words, efficient production methods and effective teaching methods often clash when industry undertakes to prepare its own workers.

Some large industrial and business organizations have recognized this situation and have developed training programs for learners which reduce or eliminate these difficulties and provide reasonably adequate preparation for work in their own organizations, though this training is often rather narrow as far as the same occupations in industry and business as a whole are concerned. But many large companies and nearly all small ones find it impracticable if not impossible to maintain a training program which resolves the fundamental conflict between production methods and training methods in modern industry. In the more leisurely handicraft stage of industry of 150 years ago, when the apprentice was bound to a master craftsman for a period of four to seven years and worked directly under this master, it was to the master's interests to train the apprentice quickly and well. Modern methods of production have changed this situation and brought about the conflict mentioned above.

Vocational preparation a cooperative enterprise under control of the public school system. Since the final cost of vocational preparation, however obtained, is paid by society as a whole; since modern industry and business cannot be expected to provide adequate vocational preparation; and since society is under the same obligation to furnish vocational as general education or abandon its claims to provide equal educational opportunity for all, the logical conclusion is that society, as a matter of economic self-protection and in meeting its responsibility to the rising generation, should determine how this preparation can be given most effectively and economically for each occupation and what public provision is necessary and desirable for the purpose. Possibly some of the preparation now given in employment could be given better in a tax-supported school before employment begins. Possibly some of that now given in a tax-supported school in advance of employment could be given better in employment. Possibly more vocational preparation should be

given upon a cooperative plan arranged between public school, employer, and workers in particular occupations.

It is logical to conclude, also, that society should approach this task and undertake to answer these and other pertinent questions through the agency which society has set up for the particular purpose of doing educational jobs—the public school system. With its traditions along this line, its staff trained for this purpose, and its methods developed to this end, surely the school system should be better qualified to have charge of the needed educational jobs of the community than any other agency. But no school system can solve this difficult problem alone. Cooperation with employers and with workers is absolutely essential to an effective program of vocational preparation in any community. Failure to obtain this cooperation will be just as fatal to the program as failure of the school system to assume the leadership and the responsibility that belong to it in carrying forward this important educational undertaking.

A continuous occupational survey of community necessary. Only one satisfactory way has yet been found in which public school authorities in any community can determine what vocational preparation they should provide and how they should provide it. A careful investigation or survey of each occupation, with the cooperation of workers and employers, is necessary. Such an investigation must seek to answer the questions: (1) What training is necessary for success in the occupation? (2) What conditions are necessary in order that this training may be given effectively and economically? (3) Can these conditions best be realized in a tax-supported school, in employment itself, or in a combination of the two? Furthermore, evidence of this character must be kept up to date by checking from time to time as conditions change.

It will be found that the same investigation which supplies the information needed to determine how preparation for a given occupation should be provided will readily supply also the material needed concerning the same occupation in occupational information courses and in individual counseling. Really, a continuous occupational survey of the community is needed for all three of these purposes and should be provided for in a comprehensive program of vocational guidance. Along with this survey would go, very naturally, an investigation of the effectiveness of

the vocational preparation which the schools are providing; for it will be found necessary not only to determine what vocational preparation the school system should furnish but also to ascertain from time to time how effectively this is given. In planning and carrying through a survey of this type, *How to Make a Community Youth Survey*, a pamphlet published recently by the American Youth Commission, will be found helpful.

When it is proposed that the vocational preparation which a community ought to furnish through its public schools should be determined by a local survey, it is assumed that needs of this character differ in different communities. The population of the community, the general character of its industrial and business activities, the number of trained workers needed in various lines of employment, the vocational education already provided in various ways, the extent and character of cooperation which may be expected from employers and workers, and many other things would have to be taken into account. It is never safe, though it is often done, for one school system to launch a given program of vocational preparation simply because this program has proved successful in another school system.

Nevertheless, along with the survey of local conditions should always go a careful consideration of efforts made by other cities to meet their conditions and needs. What has been done elsewhere often suggests interesting possibilities even though it may safely be copied outright only under exactly similar conditions. Also, in determining the vocational education program of any community the needs of those who will seek employment elsewhere as well as of those who remain in the community should be considered.

Types of vocational preparation. In the light of what has just been said concerning certain principles and procedures underlying a program of public vocational education, it is logical to ask what the secondary schools are now doing in this respect and what new developments are in prospect.

Three general types of vocational preparation have found permanent places in American school systems. Work of all three types is carried on in the agricultural, commercial, home-economics, and industrial fields. The three types are:

1. Preparation before employment begins.
2. Preparation in connection with employment.

3. Preparation for change of occupation.

Preparation before employment begins. When public school authorities first undertook to provide vocational preparation, it was to be expected that educational administrators would think first in terms of the school organization with which they were already familiar. Consequently commercial classes were organized in high schools and, in some of the larger cities, commercial high schools were established to provide high school boys and girls with preparation for business occupations. Following the same lead, household-arts or homemaking courses were developed, classes in agriculture were organized for rural youth, and high school classes or special schools to prepare boys and girls for industrial occupations were established. To be sure, the actual vocational value of much of the work was and still is open to question, but in so far as it was vocational at all it was almost wholly preparation in advance of employment.

1. *For business pursuits.* This type of preparation for business pursuits has proved very popular. As noted earlier, the report of the North Central Association of Colleges and Secondary Schools for 1935 shows that two-thirds of the 1,330,142 students in the 2,558 schools represented were enrolled in commercial subjects. Of course, many of these were taking only one or two commercial subjects for personal use or as part of their general education. But it is well known that the commercial subjects make a stronger vocational appeal to high school students than do the subjects of any other group. Questions might fairly be raised concerning the proportion of commercial occupations for which preparation is provided and the quality of the preparation offered in many of the smaller schools; also, whether many of these boys and girls might not better be preparing for other than commercial occupations. The fact, remains, however, that preparation on this plan for certain occupations in the business field at least attracts the students and gives every indication of being practicable, especially for typing, stenographic, bookkeeping, and general office positions.

2. *For homemaking.* Preparation for homemaking, in so far as the schools have undertaken it, also has been conducted chiefly on the same plan; that is, in advance of actual responsibility for the work of homemaking. The North Central report just referred to shows that a little less than 30 per cent of the girls

enrolled in the schools represented were pursuing the so-called "homemaking subjects" in regular high school classes in 1935. While this is not a large percentage of the girls who will assume homemaking responsibilities, and while many questions might be raised as to the narrowness and ineffectiveness of much of the preparation furnished, here is evidence of a widespread effort on the part of public high schools to provide a much needed type of vocational education. The fact that nearly all girls will have to assume homemaking responsibilities, and the further fact that practice work or projects can be carried on in the girls' homes in connection with school instruction, make this occupation one for which preparation in advance of regular employment is particularly suitable. There are always enough pupils with common interests to form classes, and opportunities for practical application of the instruction are always available. It must be admitted, however, that this occupation, does not either in its preparation aspect or in any other aspect, receive the attention it deserves in vocational guidance programs, probably because it is not a "wage-earning" occupation.

3. *For agricultural pursuits.* While preparation for agricultural occupations, as a public school enterprise, is carried on almost wholly before regular entrance upon the occupations, nevertheless the fact that many of the students assist their fathers in farm work on Saturdays and in the summer vacations, and the further fact that a considerable amount of supervised home-project work is required make it possible to give this preparation a certain practical character not usually found in vocational education which precedes employment. In fact, elements of another plan of training are present, the plan which provides preparation along with practical experience in the occupation.

However, agricultural education, as noted in an earlier chapter, has found a place in few large school systems. It is generally thought of as belonging to the small community where rural life and interests are strong. Only a small percentage of the communities in which federally aided agricultural classes are conducted have a population of 5,000 or more. And yet, as pointed out earlier, there seems to be no good reason why an adequate system of vocational guidance should not discover many youths in every large city who might well be general farmers or farm specialists and who need an opportunity to prepare for this work

while still in school. Modern life is so organized that it encourages farm boys to go into the industrial, business, and professional occupations of the cities. It would be fortunate if more city schools would help their youth to find out whether they are suited to farming and to help those prepare for it who find it a desirable occupation. Surely, with a rural population of more than 50 million, the high schools of the United States should be preparing more than 305,031¹ for agricultural occupations. This is, however, a very substantial increase over the 67,545 reported enrolled in such courses 14 years earlier.

4. *For industrial pursuits.* One serious difficulty encountered in preparing youth in advance of employment for industrial occupations is that, to a far greater extent than commercial, homemaking, or agricultural education, industrial education breaks up into preparation for specific occupations, such as carpentry, bricklaying, plumbing, painting, toolmaking, die-sinking, patternmaking, printing, and the like. Thus the number of occupations for which preparation is needed is much larger than in the other fields. Only in cities of considerable size or in those where a single industry dominates, are there found enough boys who wish to prepare for any one of these occupations to justify the expense of maintaining the necessary equipment and employing the properly prepared teacher. Efforts made in Connecticut to overcome this difficulty by developing a system of state trade schools, with provision for daily transportation of students to and from school if they live at a considerable distance, have met with success, though even in Connecticut some reside so far away that they find it necessary to obtain temporary living accommodations in the town where the school of their choice is located.

Another difficulty which must be faced frankly is that when a student completes a two-year trade course at sixteen or seventeen years of age, it is practically impossible for him to find employment at that trade, even with the aid of an efficient school placement office. Industry and labor discourage employment of youth under eighteen years of age and many employers refuse

¹ *Digest of Annual Reports of State Boards for Vocational Education to the Office of Education, Vocational Division, for the Fiscal Year Ending June 30, 1939*, p. 108, issued by the Federal Security Agency, Washington: U.S. Office of Education, Vocational Division.

to consider applicants under twenty. Important new factors affecting the situation are minimum wage legislation, desirable as it appears to be in most respects; workmen's compensation laws, which forbid employment in many types of work of youth under eighteen years of age; and the seniority provision of agreements between employers and labor organizations which require that, when the working force is reduced, those most recently hired shall be laid off first, and when the force is later expanded, former employees shall be taken back in the order of their original hiring before new workers can be taken on. The fact is that entrance into wage-earning occupations comes later in the life of the individual than it did 10 or 20 years ago. Indications point to the continuance of this trend. The result is that preparation for specific industrial occupations in all-day schools now comes later in the student's life than formerly. In fact, there is a growing belief, well expressed in the report of the New York State Regents' Inquiry, that

What a boy needs vocationally is not so much a "trade" when he leaves school at the age of sixteen, seventeen or eighteen, as sound knowledge undergirding a family of occupations, an understanding of the scientific facts and the economics lying back of these trades, the ability and the character to work effectively with others, and an appreciation of the way changes come and the way the individual may best adjust himself to them. To cap this, at the very end, just before he has a real chance of getting a job, he needs an immediately marketable skill.¹

Enrollments in federally aided industrial schools and classes of the all-day type in the United States have increased rapidly in recent years, being 57,439 in 1928 and 196,465 in 1939. Continued growth may reasonably be expected, but nothing like the growth anticipated by some leaders in industrial education 30 years ago, who believed that three-fourths of the boys and girls who were then leaving school as early as possible to enter industry would stay in school and learn trades if the opportunity were provided. So many industrial occupations require only a limited amount of preparation in advance of employment that this cannot be expected. At present the number enrolled is about 1.2 per cent of the number of workers in the manufacturing and mechanical occupations in this country.

¹LUTHER GULICK, *Education for American Life*, p. 22, New York: McGraw-Hill Book Company, Inc., 1938.

Notwithstanding these difficulties and others that might be mentioned, there can be no question that a great deal of valuable vocational preparation is now obtained in all-day industrial schools, nor, on the other hand, any doubt that much more preparation of this sort might be carried on with profit as a part of public education in advance of actual employment. This is especially true when preparation for a "family" of industrial occupations as well as for specific trades is taken into account. All large cities find a genuine demand for vocational preparation in advance of employment and every city of more than 50,000 population should give careful consideration to the desirability of providing it for a limited number of specific occupations. Nor does it seem too much to expect that more state schools for training industrial workers may be established, and more adequate provision made for pupils to earn their living by work done in the school in connection with their training.

Vocational preparation by means of supervised correspondence courses. An effort to overcome the first difficulty mentioned, namely, that of providing in a small community preparation for a variety of occupations, deserves attention here. In 1922-1923 arrangements were made by S. C. Mitchell, principal of the high school at Benton Harbor, Mich., for a few of his pupils to obtain vocational preparation from a Chicago correspondence school. At first, each student's correspondence course work was done under the principal's supervision. Later, after Mr. Mitchell became superintendent of schools, the work was taken over as a public school project and a full-time teacher was employed as supervisor of correspondence study. The correspondence school agreed to charge comparatively small fees for its courses taken in this way. The Benton Harbor Board of Education agreed to pay these fees, believing that this was not only the most economical way but also the only way in which they could provide some of the vocational preparation their high school pupils needed. The supervisor made the necessary arrangements for each student, sent in the papers to the correspondence school, and looked after the work in other ways.

Later other correspondence schools were brought into the arrangement for the purpose of widening the range of vocational courses offered. In 1938-1939 this little city of 17,000 population had 247 high school students, 22 students in part-time school,

and 4 physically handicapped persons obtaining preparation for occupations on this plan. The list of courses taken included the following: accounting, air conditioning, architectural drafting, automobile mechanics, aviation, building contracting, business management, cartooning, commercial art, Diesel engines, finger-printing and classification, foundry-shop theory, journalism, machine drafting, navigation, patternmaking theory, photography, practical electricity, practical nursing, radio, reading shop blueprints, refrigeration, salesmanship, service-station work, sign painting, shop practice, sheet-metal pattern drafting, special shop mathematics, taxidermy. Twelve correspondence schools were cooperating in this work. Provision was made for laboratory work in such subjects as electricity, radio, aviation, and automobile mechanics.

The largest and best known correspondence schools are now promoting this plan with high schools throughout the country. Besides offering a possible solution of the small town's difficulty in providing varied vocational preparation, the plan also may be used by larger cities to supplement its usual program by providing preparation for those occupations which appeal to comparatively few pupils. In no case, however, should correspondence study be looked upon as a substitute for class instruction where it is practicable to organize and conduct the latter.

Preparation in connection with employment. Vocational preparation carried on in connection with employment is of three general types. In one type the student is under supervision of the school and his employment is looked upon as primarily a means of contributing to his vocational preparation. In some cases one-half time is spent in school and the other half at work, while in other cases the proportion of time spent in school is smaller. In the second type he is primarily a worker and the school aids him in preparing better for the work he is already doing or for the next job ahead. Only a few hours per week are spent in the school. In the third type the learner acquires skill and knowledge on the job without spending any time in a school. To the first type belong the "cooperative" program and the "diversified occupations" program. To the second type belong supervised apprenticeship, the part-time school, and evening vocational classes for adults, the three together being sometimes called "continuation schools." To the third type belongs more

or less informal instruction given usually by foreman or fellow worker as work goes on.

The cooperative and diversified-occupations programs. An important difference between these two is that under the cooperative plan students work in pairs, with one on the job and the other in school for a week or more at a time, while under the diversified-occupations plan each student usually works a half-day and is in school a half-day with no one taking his place on the job when he is in school. Both plans are really cooperative in that they both depend upon a high degree of cooperation between school and employers and both make use of employment facilities for teaching the manipulative aspects of the occupation. Both have been used rather extensively in the industrial and business fields, particularly in the industrial.

While the cooperative plan as originally developed more than 30 years ago has declined in popularity, its essential principles are so sound that in some form or other it seems certain to survive and expand in coming years. Apparently the diversified-occupations program is the most promising line of this development, especially in the smaller cities. Rapid expansion of the diversified-occupations work at the very time when the older cooperative work was declining seems to justify this view. A coordinator representing the school system of the community makes the necessary arrangements with employers, sees that the work to be done in employment provides good training opportunities, and usually teaches related subjects to these youth during one-half of the three hours daily that they are in school. A group of 20 youth in this setup may represent nearly as many different occupations.

The diversified-occupations program can often be coordinated advantageously with the all-day program, students passing from preparation for a "family" of occupations in the latter to preparation for a particular occupation in the former, immediately preceding full-time employment. With the beginning of full-time employment, apprentice training is continued with the apprentice coming to the school, usually evenings, for 4 or more hours of instruction per week as described in the next paragraph.

Supervised apprenticeship. This type of vocational preparation calls for a high degree of cooperation on the part of the public school system, employers, and workers. It is sponsored

jointly by the Federal Committee on Apprenticeship of the U.S. Department of Labor and the U.S. Office of Education. Provision is made in the plan set up by these sponsoring agencies for a local joint apprenticeship committee consisting of equal numbers of employers and journeymen for each trade included in the local program. A coordinator represents the school system in promoting and supervising the program and in providing related school instruction.

The local joint committee is expected to see that apprentices are regularly indentured for a definite period; that the ratio of apprentices to journeymen and other recognized labor standards are observed; and, in cooperation with the coordinator, that suitable work programs are set up for the apprentices in their places of employment. The apprentices are required to attend school classes related to the trade for at least 144 hours per year. Usually these classes meet two evenings per week for 2 hours each evening. The period of apprenticeship under this program varies from two to five years. In the steam-fitters' trade national standards have been set up fixing a minimum age of sixteen years, providing for a five-year apprenticeship, and requiring high school or vocational school graduation, or twenty-one years of age and actual experience in the trade along with unusual qualifications, for entrance to the apprenticeship-training program.

In some school systems the same coordinator is responsible for both the diversified-occupations program and the supervised-apprenticeship program.

Part-time schools. A type of vocational preparation conducted by public school systems which reaches a considerable number of youth after employment begins is found in the part-time school. Aimed at helping young workers to make any needed adjustments to employment life as well as to provide them with training for particular jobs, part-time schools are classified by the U.S. Office of Education as trade extension and general continuation, the latter serving youth whose occupations require little skill or technical knowledge. In about one-half the states part-time schools are required by law. The legal requirements differ in different states in regard to the population of the school district which must establish a part-time school, the number of hours per week that youth must attend (varying from four to eight hours), the age to which attendance is required (sixteen

years in some states, seventeen in others, and eighteen in others), conditions on which exemption from attendance is permitted, and in other respects.

According to the U.S. Office of Education, enrollments in general continuation part-time schools and classes declined from a high of 348,018 in 1928 to 141,215 in 1939. The reason for this seems to be that youth of this age group have found it increasingly difficult to obtain any kind of employment before reaching the age of exemption from compulsory attendance at part-time school, and so they remain in full-time school. As a result of so marked a decline in attendance there has been a disposition to assume that this type of vocational education will disappear. This assumption does not seem justified. Here, again, the principle involved is so sound that the general part-time school or class in some form must be expected to continue and probably to expand again as adjustments to changing conditions are made.

However, such expansion as may occur will be due mainly to the attendance of older students, either because of extending the age limit for exemption from attendance or because the service performed appeals to employers and young workers alike as so worth while that many will attend voluntarily with their employers' approval. If the part-time school of the general continuation type should decline further, some other plan by which vocational preparation of similar kind can be obtained a few hours per week by young workers in lower level occupations along with their employment and during daylight hours will probably take its place. The shorter working week should make this possible.

It is worthy of note that while enrollments in part-time general continuation schools were declining, as indicated above, enrollments in part-time trade extension schools increased from 85,920 in 1928 to 221,145 in 1939. Many who attend these schools do so voluntarily. For the most part the youth attending trade extension part-time classes are older than those in the general continuation classes and a larger proportion attend voluntarily. In some cases they are apprentices, whether indentured or not.

Evening schools and classes. Vocational preparation in evening classes conducted by the public schools is so generally recognized as desirable where conditions warrant its establish-

ment that little discussion of it is necessary here. The principal purpose of this type of work is to supplement the daily experiences of adult workers and thus make them more proficient in the occupations in which they are already engaged. To some extent preparation for industrial occupations not yet entered is provided in evening schools. But the federal government, in disbursing money for evening classes in the industrial field, recognizes only trade extension work, or work supplementing daily employment. There were 156,464 students enrolled in such federally aided classes in the United States during the year ending June 30, 1939. The same year there were 216,034 taking federally aided evening courses in home economics and 181,962 taking similar courses in agriculture. For business occupations many city school systems offer in evening classes both preparation in advance of employment and further preparation after employment begins, but federal aid is not available for either, except in case of the distributive aspects of business education.

In the smaller school systems, difficulties similar to those already discussed in considering preparation for industrial occupations in advance of employment are encountered in providing vocational education in evening classes. Some of these difficulties might be overcome by extending the Benton Harbor plan of supervised correspondence study to evening school work.

Evening schools will no doubt continue to be an important means of providing vocational extension education for adult workers of all ages. In performing this function they will add new courses from time to time to meet new needs arising from development of new industries, as has been done recently in air conditioning. But the new legislation enacted from time to time affecting agriculture, industry, and business places new responsibilities on evening vocational schools. For example, workers in industry need such opportunities as public evening schools can provide to study the provisions of the National Security Act, the National Labor Relations Act, the National Wages and Hours Act, and other national and state acts of similar character. They need opportunities to discuss under competent, unprejudiced leadership the fundamentals of economics and industrial history.

All these phases belong in industrial education just as truly as does trade extension training. There is growing recognition of

the fact that industrial education is education for the life of an industrial worker and is, therefore, much broader than training in skills and technical knowledge. Agricultural education is fast becoming education for a way of life and not merely a means of making two blades of grass grow where one grew before. The same must become true to a far larger extent than at present of commercial, home economics, and industrial education, not only in evening schools but also in all-day, part-time and every other type of vocational school.

Preparation on the job. Thus far attention has been given only to those types of vocational education which are carried on in connection with schools. While plant schools have not been mentioned, what has been said applies to them as well as to public schools.

It is a well-known fact, however, that an immense amount of vocational education takes place in employment without any time set aside for instructional purposes. A foreman or a fellow worker helps the learner by means of a demonstration here or a suggestion there. The learner picks up other needed skill and knowledge by combining observation of the work of others with trial-and-error methods of his own. Some learn occupations involving considerable skill in this way. Great numbers entering semiskilled and low-grade skilled occupations are now wholly dependent upon this method of learning their work. While it must be expected that the all-day vocational schools, the diversified occupations program, the part-time classes, and the evening classes will meet this situation better in the future than they have in the past, a great deal of vocational education will continue to be obtained on the job.

Many vocational educators insist that this is the employer's responsibility and that public schools should do nothing about it. But these same educators insist that vocational education is a public responsibility; and this is vocational education. Since, as was pointed out earlier, the public finally pays for vocational education however obtained, and since business and industry are not organized to do this educational job efficiently, we must expect public school systems, in cooperation with industrial, business, and labor leaders, to bring about more effective methods of training on the job. Perhaps the actual training will still remain with industry and business but, if so, society's educational

agency, the public school system, will help to make it more effective and more economical than at present. The training of foremen in the work of teaching new recruits is, to be sure, a beginning in this direction but much more needs to be done.

Preparation for change of occupation. The necessity of providing preparation for change in employment has recently been forced upon public attention in a striking manner. That technological unemployment, the development of new industries, and voluntary changes of occupation, to say nothing of dismissals on account of depression conditions or for other reasons, will make this a permanent problem cannot be doubted. Every year a large number of adult workers will be obliged to change occupations.

More ample provision for industrial reeducation is necessary in order to meet the situation. In some cases the change can be anticipated and the needed preparation obtained before leaving the old job. In other cases the change comes suddenly and the worker finds himself in a new job for which supplemental training must be obtained. In many cases a period, often a long period, of unemployment accompanies the change, and preparation can be obtained while the individual is unemployed.

To meet the first of these conditions, industrial preparatory work, perhaps in new fields outside of working hours, will be needed. To meet the second, trade extension courses such as have long been provided, but in new as well as old fields. To meet the third, intensive, all-day industrial preparatory work. In all cases careful vocational counseling should precede choice of the new occupation for which preparation is made. With the shorter working week, Saturday forenoons may well take the place of evenings for a growing percentage of this work.

Relation of economic and social trends to vocational preparation. From what has been said in this chapter it is quite obvious that vocational education leaders need constantly to be alert to the changes that are taking place in business and industry, and in social institutions generally, if the program of vocational preparation is to serve its purpose effectively. The trend toward entrance into occupational life at a later age has given rise to important questions affecting the all-day, part-time, and diversified-occupations programs.

Technological unemployment is constantly bringing up new problems of vocational reeducation in order that those displaced may reenter employment life as advantageously as possible.

The trend toward breaking up a skilled occupation into a group of specialized occupations still continues, bringing with it the necessity for changes in content and methods of preparation and in some cases transferring the preparation from one type of vocational school or class to another.

The development of new industries based upon recent inventions calls for the organization of new courses in order that workers may be prepared for the occupations involved. The list of such inventions mentioned in 1937 by the National Resources Committee in its report on social planning includes: the mechanical cotton picker, air-conditioning equipment, plastics, the photoelectric cell, artificial cotton and woolen fibers made from cellulose, synthetic rubber, prefabricated houses, television, facsimile transmission, the automobile trailer, gasoline produced from coal, steep-flight aircraft, and tray agriculture. If the probable effects of these inventions deserve study for purposes of social planning they certainly deserve attention in relation to their effects upon vocational education which is an essential part of social planning.

Unless these and other trends are watched with care by educational leaders and necessary changes made promptly when the need for change is clear, vocational education will be, as it has often been in the past, preparation for occupations already outmoded instead of for work that lies ahead.¹

Vocational preparation an expanding service. The past two decades have seen an enormous expansion of vocational education

¹ The significance for vocational education of long-time trends in productive enterprise appears clearly in the following: "From the building of the Pyramids down to the present day, the proportion of the world's work of the nature of mere physical digging, pushing, carrying, lifting, and hammering, by the exertion of muscular force, has almost continuously diminished. From the cutting of the canal at Corinth to the cutting of that at Panama, the share of the thinker, the architect, the designer, the draftsman, the engineer, the toolmaker, the accountant, and the clerk, in every productive enterprise has become steadily larger; and the proportion of workers so engaged has grown accordingly." SIDNEY WEBB and BEATRICE WEBB, "Labor," in *Whither Mankind*, edited by Charles A. Beard, Chap. V, p. 140, New York: Longmans, Green & Company, 1928.

in America. Passage of the Smith-Hughes Act in 1917, providing federal aid for agricultural, homemaking, and industrial education of less than college grade, did much to stimulate this expansion. Additional federal appropriations authorized by the George-Deen Act of 1936 gave the movement further impetus. The flooding of high schools in recent years with youth who would be in full-time employment if conditions had remained as they were two or three decades ago has forced school authorities to give more attention to the needs of the 85 per cent of high school graduates who do not go to college.

The public generally is more ready today than at any time in the past to support an educational program rich in its vocational aspects for these youth. There is every reason to believe that vocational education will continue to expand, mainly along lines discussed above, and will take a larger place in programs of public education, as American youth remain longer in school and the demand for adult education becomes more insistent. It seems likely that this expanding vocational preparation will be broader than it has generally been in the past; that it will be concerned with the way of life of the industrial worker, the farmer, the business worker, and the homemaker as well as with proficiency in doing the things of particular occupations; and that social and economic aspects of the occupation or group of occupations to which the worker belongs will be given greater emphasis.

SUMMARY

Vocational preparation is an essential part of the problem of transfer from school to occupational life, with which vocational guidance is concerned.

The public finally pays for vocational preparation, however it is provided. The public should, therefore, see that this preparation is provided efficiently and economically. Also, "equal educational opportunity for all" is an empty slogan unless the public assumes this responsibility. Industry is organized to do production jobs. Vocational preparation is an educational job. The interests of the two types of jobs often conflict to the disadvantage of the latter, when vocational preparation is provided wholly by the employer. The school system is the public's chosen agency set up for the purpose of doing educational jobs. From the point of view of the interests of society as a whole, of the

individual learner, and of the employer, the school system must carry the responsibility for vocational preparation. However, it is necessary that the school system work in cooperation with employers and organized workers in this matter. Only through a continuing survey in which these three groups participate can the vocational education needs of a community be properly determined.

Three general types of vocational education have developed in American secondary schools:

1. Preparation before employment begins.
2. Preparation in connection with employment.
3. Preparation for change of employment.

All three of these are found under public school supervision in varying proportions in the fields of agriculture, business, homemaking, and industry. There is growing interest in training youth on the preemployment plan for a group or family of occupations before preparation for a specific occupation is begun. Supervised correspondence courses have been introduced in many high schools to supplement the training provided on the pre-employment plan. Vocational preparation in connection with employment is provided for apprentices and others who work half-time, for apprentices and others who work full-time and attend evening classes, and for semiskilled and other workers who obtain their preparation wholly on the job. In recent years various plans of preparation for change of jobs have been set up to meet the needs of workers thrown out of employment by technological changes in industry.

The trend toward entrance into employment at a later age, increased technological unemployment, the continued breaking up of skilled occupations into groups of specialties, the development of new industries based upon recent inventions, and other developments of a social and economic nature are constantly making readjustments in vocational education necessary. In order to meet changing conditions and because of growing popular interest stimulated by federal aid, vocational education seems destined to continue the expansion and the readjustment which have marked its recent history.

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CHAPTER XV

THE PLACEMENT SERVICE

Objections to placement as a school function. Even among ardent supporters of vocational guidance, there are those who insist that the schools should not undertake to help young people find employment when they leave school. It is argued that the knowledge a youth has obtained through the occupational information courses, exploratory experiences, and individual counseling should guard him against any serious mistakes in obtaining employment, that such mistakes as are made will soon be corrected by a change in employment, and that it is a mistake in the direction of too great paternalism to deprive the individual of the opportunity and necessity to exercise his own initiative and ingenuity in finding his own job.

It is insisted, also, that where the placement service is included in the school program it is extremely difficult to keep it from monopolizing attention and support that belongs to other aspects of vocational guidance. It is pointed out, moreover, that in most communities a youth seeking his first job now has access to the state employment service whose business is to find employment opportunities for young as well as older workers. Why duplicate in the school system costly services for which other provision is made at public expense? Let the schools confine their attention, it is argued, to providing adequate assistance in choosing and preparing for vocations and leave placement to the agency whose business is job finding.

Vocational guidance program incomplete without placement. In support of including placement in the school program of vocational guidance, whether done directly by the school system or in cooperation with the local office of the state employment service, it is maintained that the whole program is left in mid-air, unfinished, if provision for this service is not included; that getting off to a good start in the chosen occupation is quite as important as choosing it, and there is no more reason to expect the unaided

youth to do the one to the best advantage than the other. If left to his own devices he may find employment that gives him just the desired opportunity. On the other hand, he may begin work in his chosen field under conditions that are very unfavorable to his future growth and advancement. Or failing after repeated efforts to find the desired opportunity, he may take any job he can get regardless of its relationship to what he had hoped to do. Or, in extremely dull times, he may even be unable to find any employment at all for many months, in which case his morale is almost sure to suffer serious impairment at the same time that the edge of his interest is dulled and the benefits of his preparation are lost. Let the school system finish what it has begun and help the youth get off to a good start in the occupation which it helped him to choose and for which it provided him with a certain amount of preparation.

School placement office in position to render a discriminating service. Certainly a well-managed school placement office for youth leaving school to enter employment will have available, or be in position to obtain, much more complete and reliable information concerning the different openings in a given occupation—where these openings are, their peculiar requirements, opportunities for promotion within the organization concerned, whether the management is interested in developing its young workers or merely in exploiting them, and the like—than an individual student can possibly obtain on his own account. On the other hand, such an office will have available through the counselors' records in the different schools much more complete information concerning the youth who have chosen to enter a particular occupation than employers could possibly obtain from any other source. It must be granted that bringing these two together is a service of great value to the prospective young worker and to the employer alike when performed in an honest and discriminating manner.

Student initiative not eliminated by placement. This service does not necessarily eliminate the exercise of initiative or ingenuity on the part of the individual seeking placement. It does not, or should not, say to a boy: "Here is just the right job for you. Report tomorrow morning to Mr. X and he will start you at work." Even if this were possible it would not be fair either to boy or to employer. In the first place the boy may ignore the

placement office altogether if he sees fit and find his own job. In the second place, if he asks the aid of the placement office, as he should be encouraged to do, he will still have the responsibility of deciding whether he would like the particular position that the office brings to his attention and the further responsibility of applying for the position and convincing the employer that he is the best individual available for it.

Whether he learns of the position through his own efforts or through the placement office, the task of "selling" his services to the employer is still his and calls for initiative and ingenuity. The difference is in the ease with which he finds a promising market, the more complete knowledge in advance of what he may expect in the nature of opportunities if he makes the sale, and usually a more favorable initial attitude on the part of the prospective buyer. It cannot be doubted that in many cases the youth is saved by the placement office from a discouraging and wasteful period of search which would have ended in acceptance of employment quite different from the occupation which he had chosen and for which he had prepared.

Placement service aid to other vocational guidance activities.

It is true that placement work tends to attract public attention more than other aspects of the guidance program. The very nature of its work requires that it attract attention. The school placement office is in a sense the sales organization for disposal of the school system's product, or for that part of it which does not go to higher institutions for further preparation. A sales organization that does not attract attention is a failure. Looking at the matter from another angle, a report of the placement office to the effect that 1,000 boys and girls who were leaving school were placed in positions last year is likely to prove more interesting to the average school-board member than a report that 5,000 counseling interviews were held with pupils in the same length of time.

But a wise leader of the vocational guidance program and a wise superintendent of schools will make it clear that real success in these placements depends upon the quality of the occupational information courses, the tryout experiences, the individual counseling, and the vocational preparatory work done before the time of placement arrived; just as the success of a sales department is determined by the earlier work done in the factory. There is no

good reason why placement work, even though more spectacular, should detract in any way from adequate support of other parts of the guidance program. Indeed, quite the reverse should be true. Successful placement work should attract attention and support to the entire program. Also, through the contacts of placement workers with industry and business, the prestige of the school system in the community should be increased and suggestions for improvement of its work as a whole obtained.

Advisability of leaving the placement service to public employment offices. With the development of the federal-state employment service¹ has come a tendency to expect local offices of this service to handle the placement of youth who are leaving school along with that of adults. When this service was authorized by the Wagner-Peyser Act of 1933, it was contemplated that a national federation of state public employment offices would result, guided by federal standards and under federal supervision, but locally administered. At the time this is written all the 48 states are operating employment services in cooperation with the federal government under this act. For example, Michigan maintains 1 state, 7 district, and 55 local free employment offices. Each local office is expected to serve a definite area surrounding the city in which it is located, the entire state thus being covered by the service. In connection with administration of the National Security Act it is required that every claimant for unemployment compensation benefits register for work at his local employment office of the state employment service and report regularly to this office as proof of availability for work and of continued eligibility for unemployment benefit payments.

Certain advantages of this setup are at once apparent. Assistance in obtaining a job is thus available, in theory at least, to every employable individual in the state, young as well as old. It would seem that the adequacy of this assistance is reasonably well assured, since the office is financed jointly by federal and state funds and its work is under the supervision of both federal and state authorities. Since the same office is concerned with unemployment compensation, all in the area served who are

¹ Originally set up in the U.S. Department of Labor, the U.S. Employment Service was transferred July 1, 1939, to the new Federal Security Agency. The name has since been changed to U.S. Bureau of Employment Security.

eligible for such compensation must register and maintain contacts with this office. Thus young workers seeking reemployment are already familiar with the local office of the state employment service. On account of its necessary contacts with employers and the varied services it performs, no other agency in the area is likely to have such complete information concerning local employment opportunities and requirements.

Then, too, a special youth-placement program, covering the ages seventeen to twenty-five, is encouraged by the U.S. Bureau of Employment Security and is in process of development in many of the states. Several of the state employment service offices have appointed state supervisors of junior placement. Also, special junior divisions have been set up in many of the local offices with a junior counselor or placement officer in charge.

For example, the Indiana State Employment Service, in addition to providing for the registration of youth in all of its offices, has established in six different cities a Junior Division under the direction of a Junior Division Counselor to place and follow up youth "who are not yet occupationally mature." In Michigan junior counselors have been placed in 54 offices of the state employment service for the purpose of giving special attention to the employment problems of young people sixteen to twenty-five years of age. It is an advantage to the youth seeking employment to have the help of an office that is coordinated with many other offices of the same kind in other parts of the state and in other states. If the local office does not have a suitable employment opportunity for the youth, possibly one of the others may.

On the other hand, the history of such work indicates that it is extremely difficult to keep public employment offices free of objectionable political influences. Also, concerned primarily with the employment problems of adults, these agencies have a tendency to neglect the needs of the young and to think of qualifications of an individual in terms of work experiences, which only a few of the younger group have had even in limited measure, though this tendency should be less pronounced in those offices which carry on a special placement program for youth. Actually, none of these offices is yet very effective in serving youth of its own area who live outside the city in which it is located, to say nothing of serving those who may be brought

to its attention by offices in other areas. Finally, when a youth comes to an office of the state employment service for help in finding suitable employment it is quite likely that inadequate attention will be given to the mass of data gathered concerning his aptitudes, interests, achievements, and personality traits while in school. With no administrative connection between the employment office and the school system, the tendency is for each to work independently of the other, notwithstanding commendable efforts at coordination of activities.

With regard to these difficulties, however, it may be argued that bringing the employment-office personnel under civil service practically eliminates political influences and results in a qualified personnel; that the youth-placement program, with its own personnel and policies, will assure proper attention to the placement problems of youth as contrasted with those of adults; and that a cooperative arrangement between employment office and school system, already in effect in some cities, will make possible proper use of the valuable data brought together by the schools concerning their pupils.

Even if it appears that in theory the advantages in vocational placement of youth lie with the state employment service offices over placement directly by the school systems that have educated these youth, in actual practice there is still a strong case for the latter plan. A school system which is concerned with the education of an individual for eight to twelve years accumulates a mass of information concerning that individual and an interest in him as a person, especially if a well-planned program of vocational guidance is in effect; a state employment office cannot possibly acquire such data in a few brief contacts. Nor can this information and interest be passed on to any other agency by the schools without great loss. It is far easier for the employment office to pass on to the schools the information that it gathers concerning employment opportunities or to cooperate with the schools in bringing this information together.

Then, too, the values to the school system itself of carrying responsibility for helping its youth to enter employment life advantageously are very great. Members of the school system's own staff thus make daily contacts with industry and business. They learn of weaknesses in the preparation for employment life provided by the school and bring back ideas and suggestions for

improvement of the curriculum and of teaching methods. They bring to employers with whom they confer concerning placement of youth an understanding and appreciation of what the schools are doing to prepare youth for employment, often changing critics of the school system into loyal supporters. It will be unfortunate for school system and employers alike, particularly for the school system, if they find it necessary to deal with a middleman—the state employment office—instead of dealing directly each with the other.

In short, the state employment office in any community at best can do nothing for prospective young workers that cannot be done at least equally well by an efficient school placement office, while the latter, because it is part of the school system, can do much that is impossible to the former; and at the same time the school system itself is greatly benefited by doing this work.

Placement an educational service. Besides, and this is the kernel of the problem, the transfer of youth from school to occupational activities is an *educational service* and thus is a proper function of society's chosen educational agency, the school system. This transfer must come to be looked upon as one step in the educational progress of the individual, just as transfer from one school to the next higher school is now considered such a step. High schools recognize responsibility for helping the relatively small number of their graduates who plan to continue their education in college or other educational institution to select the institution, gain admission to it, and make the transfer as advantageously as possible. It is time that school systems recognize a like responsibility to the much larger number who plan to continue their education by means of work experiences; for the first few years of employment life make immensely important contributions to the education of any individual. Thus, helping an individual to get off to a good start in employment life is really helping him to find a good opportunity for his continued development or education, that education to which the schools have been making their contribution for several years.

Relationship of the federal-state employment service to placement of youth. While the school systems of several cities in the United States have maintained for years more or less effective placement services for youth, it must be granted that,

as far as the needs of the country as a whole are concerned, little more than a beginning has been made. Responsibility for action rests with local school authorities, which move slowly in developing new services, especially when handicapped financially as they have been for more than a decade. In the meantime the U.S. Bureau of Employment Security and state employment services with their aggressive national and state leadership, reasonably ample funds, and an organization that expects to reach down into every community, have launched a youth-placement program. In view of these conditions what relationship between these two interested agencies seems desirable?

In the judgment of the author, authorities who are responsible for developing the policies of the federal-state employment service should recognize that placement of youth to twenty-one years of age, and possibly older, is an educational service. Up to this age their youth-placement program would be wholly one of cooperation with the schools to the end that this educational service may be performed effectively. This cooperation would include supplying the schools with information concerning employment opportunities and requirements in occupations; developing vocational proficiency tests and maintaining a test service in this field for school students and young workers as well as for adults; experimenting with tests and other measures of aptitudes, interests, and personality traits, and informing school placement offices of the results; and other activities of similar nature. They should also subsidize school placement programs, as they have already done in some places on an experimental basis. In Philadelphia, for example, instead of setting up a new placement office for youth, the state employment office of that city helped to finance more adequately the placement work which had been carried on for many years by the city school system.

When the fixed age in the life of the individual is reached, the local office of the state employment service would then take over full responsibility for placement. The school system would now become the cooperating agency and would furnish such records, reports, and other information concerning individuals as might be helpful, keep the state employment office informed concerning evening courses and other educational opportunities available, and organize new special courses and other educational services that might be required.

It is obvious that, whatever arrangements are made for placing youth in employment, there must be a high degree of cooperation between the schools and the public employment offices.¹

Placement office activities.—Enough has been said already to give an idea of the general nature of the placement service which should be incorporated in a comprehensive program of vocational guidance and adjustment. However, a more systematic and detailed consideration of this service is desirable. What is involved in it? What are the steps through which the process of placement advances from the time it is decided that a student is to leave school until he is working successfully and with favorable outlook in an occupation for which he is suited?

The phrasing of the last question, as well as the discussion found in the pages immediately preceding, indicates that placement is not merely finding jobs for boys and girls who are leaving school. It is a much more complicated and discriminating piece of work than that. It may well include conferences between the student who is leaving and his counselor, a report concerning the student from counselor to placement worker, one or more interviews by the placement worker with the student during which registration is completed, a call on the prospective employer by the student, reports from the student to the placement office,

¹ The American Youth Commission published in 1940 a report on a study of the plans followed in Providence where the placement of youth is centralized in the schools with financial assistance provided by the state employment service; in St. Louis where this service is centralized in the local employment office of the state employment service, the schools and the National Youth Administration cooperating; and in Baltimore where both the state employment service and the local school system provide placement services. Dallas and rural areas adjacent to Baltimore and St. Louis also were included in the project. The general conclusion reached was that

"In the end, constructive results come not so much from insistence on any one plan of organization as from such universally essential things as competent professional leadership, recognition of the need for cooperation under any system, and sympathetic public support."—FLOYD W. REEVES, "After the Youth Surveys—What?" *Occupations: The Vocational Guidance Magazine*, XVIII (January, 1940), 247.

This conclusion leaves unanswered the important question: Which type of organization is *most favorable* to obtaining the desired "competent professional leadership, recognition of the need for cooperation under any system, and sympathetic public support"? Nor does it recognize the placement of youth as an educational service, nor take account of the advantages which the school system itself derives from performing the placement service.

reports from the employer to the placement office, reports from placement office to the school counselor, additional placements if necessary, and additional conferences between the counselor and former student if desired by the latter.

The counselor's interview with student needing placement. The counselor's guidance interviews with students during previous years, discussed in a previous chapter, should make it the natural thing for a student to seek the counselor's advice as soon as leaving school to go to work becomes imminent. In addition, any teacher in the school who learns that a student is planning to leave for employment should report this information at once to the counselor. Further, it might be understood throughout the school that no student can leave in good standing for the purpose of going to work without first having an interview with the counselor. In this interview, whether voluntary on the pupil's part or brought about through the initiative of the counselor, the possibility of finding employment in a relatively short time in the occupation of the student's choice and the other possibility of having first to spend many months at some other work will be discussed.

The age of the student, the nature of the chosen occupation, and the general employment conditions of the time will all have a bearing on this discussion. Whether the student must have work of some kind at once or whether he can wait a few days or even weeks in order to obtain the kind of position he wants will be taken into account, as well as the data on the student's record card and self-analysis form. Any employment plans that the student may have already or that his parents may have for him will be considered. The counselor will discuss all these matters in the light of the information which he possesses as to employment opportunities for youth such as the one before him.

After talking over with his parents the points discussed in this interview, the student should return to the counselor for another interview, and perhaps for more than one. Out of these conferences with the counselor, the student should come with a pretty definite idea of the kind of job he would like and has a right to expect and the relation of this job to his chosen occupation. He should be aware that he may have to work for some time at a less desirable job before finding the employment opportunity that he seeks; and he should have some plan for using this

period in such manner as to fit himself better for the desired opportunity. Also, he should be urged to remain in school until a position is secured and to return to the counselor some time after employment begins in order to talk over further preparation and plans for advancement in his work. If the student wishes to make use of the placement office, which he should be encouraged to do, he is now ready to be sent there by the counselor.

Information needed by the placement office. Before the placement worker sees the student, he should have received the counselor's report giving the student's name, address, telephone number, age, grade, nationality, occupations of parents, intelligence rating, health record, school record, choice of occupation, moral and social qualities insofar as these have been recorded, evidence as to emotional stability, suggestions as to the general character of the first job desirable, and such other data as the vocational guidance department may have agreed upon as important for this occasion. If it is preferable, certain of this information may be furnished by the student as he fills out a registration card upon his first appearance at the placement office.

Of course, the placement office will have at hand information concerning available jobs. This office will have built up such relationships with many employers of young workers that when an opening for this kind of worker occurs a request will be sent immediately to the placement office, describing the position and the type of worker needed. With a few employers there will be an arrangement for the placement office to let them know whenever a promising youth interested in their line of work is seeking employment. The number of employers of these two types will gradually increase as the work of the placement office becomes more efficient and better known. The office will develop a system for finding out about other openings, making use for this purpose of those it has placed, communicating by telephone or letter with places likely to need young workers, and conducting employment opportunity surveys from time to time. In all of this work the cooperation of the state employment service will be sought. Naturally, the office will have on file as complete information as it can obtain concerning desirable and undesirable features of each position, and a list of the qualifications required.

Placement worker's interview with student. The interview between placement worker and student should serve several

purposes. In the first place it should aid this worker in deciding upon the positions for which he is willing to recommend the student, though the counselor's report will be given the greatest weight in this matter. In the second place it should help him in making his recommendation definite. In the third place it should give the student opportunity to learn about and weigh the merits of positions suggested by the placement worker. In the fourth place it should aid the student in making his application to the prospective employer as effective as possible by calling the student's attention to defects of dress, manner, and personal appearance that should be corrected and by suggesting a good method of procedure in applying for the position he seeks, in order that he may make a good first impression.

Even a little training in how to apply for a job often proves a deciding factor in favor of the applicant. While discussion of things to be observed in applying for a position would undoubtedly have taken place in the vocational information class, it is nevertheless a good plan for the placement worker to bring these matters to the youth's attention just before he starts out to make the application.

At the close of the interview, the placement worker will either send the youth to apply for a job, giving him a letter of introduction to the prospective employer, or tell him that he will be notified as soon as the placement office learns of a suitable opening. Of course, the placement worker *will take account of the job's money value, its value in training the young worker, and its value in establishing a work history*, and weigh these in relation to the abilities and needs of the individual in proposing jobs for which application is to be made.

Reports concerning placement. It goes without saying that the student will be expected to report back to the placement office whether he was employed and, if so, the wages he receives and the nature of the work he does. It is to be expected, also, that the employer will send in a similar report. As a matter of fact, however, the placement office will often find it necessary to obtain this information by telephone or by a visit to the place of employment, even though the young applicant carries with him when he makes application an addressed postal card form for such a report or a duplicate form, one part to be filled out and returned by himself and the other part by his employer.

The report from the placement office to the counselor after the student is placed would give a brief summary of the case, indicating whether it was necessary to recommend him to more than one employer, stating the character of the work the youth is doing and the name of his employer, and suggesting any special training the young worker should obtain in order to fit himself better for his work or to prepare for promotion. This information would then be available for use if the youth, as he was urged to do, should come back for one or more later interviews with the counselor.

Primary concern of placement office the interests of youth. It has been suggested that a placement office will gain the cooperation and support of employers of youth if it consistently performs a discriminating service. This implies careful study of the needs of employers before recommending young workers. Genuine effort to meet the needs and even the idiosyncrasies of employers is necessary if a desirable relationship with them is to prevail. However, a placement worker will make a serious mistake if he considers his obligations to employers above those to the youth who seek his help. His first obligation is to the latter. Whatever else happens he must give his best service to aiding each youth to get off to a good start in employment life. Usually he will find that in doing this he is best serving employers also. But if a conflict arises between the interests of these two there can be no question that his decision should be in favor of youth. Even if such a decision brings temporary embarrassment it will win approval and support ultimately.

Central placement office best. Running through all this discussion has been the assumption that there will be a single central placement office for the entire school system. In some cities, placement work has been carried on for years to a greater or less extent by one or more of the high schools. Where this has been the case the tendency is, when a comprehensive guidance program is undertaken, either to extend this plan to all the high and vocational schools or to allow it to continue in those where it already exists, notwithstanding the establishment of a central office for placement purposes.

A single central office in charge of all placement work of the school system will be found to have many advantages over either of these other arrangements. Perhaps the most important of

these advantages will be better cooperation from employers. If the average employer learns that he can draw upon the available supply of young labor from the entire school system by calling a single office on the telephone, he is much more likely to do this than if he knows his call will bring him only such service as one school can give. He will be more ready to submit reports and assist in other ways if he is dealing with one office rather than with several.

The central office likewise opens up to each pupil who is leaving school the employment opportunities in his field afforded by the entire city. Good administrative policy also demands a central office for placement work. It is argued that the central office cannot possibly have that intimate knowledge of the pupil's characteristics and qualifications which is obtained by the counselor and that, therefore, central office placement is likely to become a card-catalogue, mechanical sort of thing. This difficulty can be overcome, or largely so, if there is cordial cooperation between central office and counselors in carrying on the placement work. As one placement officer aptly expresses it, "Counseling becomes practical and placement becomes educational in direct proportion to the extent of cooperation between the counselor and the placement officer." Of course, in the small school system the two functions will be performed by the same individual.

Placement a problem of large proportions. When it is recalled that nearly 2 million boys and girls and young men and women leave our schools and colleges annually seeking opportunities in wage-earning occupations, the enormous proportions of the placement problem are apparent. The difficulties of the problem are intensified by the fact that the great majority of these youth need placement help within a period of a few weeks at the end of the school year. Then a veritable flood of graduates and others pour from the schools eager for employment. Of the 2 million, a great many, of course, will find their own positions; but the number who will wish to avail themselves of the placement service of the schools will be very large, especially in cities of 50,000 or more population. Would not the cost of maintaining the needed placement machinery at ordinary times be prohibitive? And would not this machinery be utterly swamped with work at the end of each school year?

School superintendents and boards of education have a way of finding money for things which they are convinced should be done. School placement work, if well done, is so obviously worth while that there need be no fear for its financial support, once those in authority are brought to realize its possibilities. The danger, as noted earlier, is rather that it will get more than its share of the money apportioned to vocational guidance. Several city school systems are now financing fairly adequate placement offices, and will put more money into this work as developments justify it. Besides, as noted earlier, it is to be hoped that financial assistance for this work will come from federal and state funds through the state employment service.

Load of placement work unevenly distributed. In some respects it is unfortunate that so large a part of the annual supply of young labor becomes available at one time; namely, at the close of the school year. The situation has been much improved by semiannual promotions which cause a considerable number of graduates and others to leave in midwinter, but this still leaves placement work congested at two comparatively brief periods instead of distributed fairly evenly throughout the year.

Possibly it may be found desirable to organize reservoir classes for those young people who are awaiting employment after graduation, providing them with special instruction in preparation for wage earning. Part of the instruction might be vocational and part civic and economic in character. These classes could then be drawn upon through the placement office to recruit the supply of young workers as needed in the community. Such an arrangement is not very different from what Boston school authorities did several years ago when they required continuation-school children temporarily out of employment to spend 20 hours per week in the continuation school. In some high schools graduates now are encouraged to remain in school for post-graduate work until they are placed.

Even better than any of these arrangements would be the Adjustment Institute discussed in the next chapter. However, at present the best the average placement office can do when it becomes swamped with prospective young workers once or twice a year is to place advantageously as many as possible, place others in temporary positions with the understanding that they will be helped later to obtain the kind of work they should have,

and make others wait until opportunities for their employment are more favorable. Fairness and a knowledge of home conditions are necessary in determining what to do in each case. If anyone objects or becomes impatient, he is at liberty to seek employment for himself. Even though the work which a placement office can do in these periods of stress is far from satisfactory, nevertheless it should be far more successful than the efforts of the majority of those who attempt to find employment without availing themselves of placement aid.

Relation of placement to counseling. In some cities, the placement office does a large amount of vocational counseling in connection with its placement work. Usually this is due to the fact that other parts of the vocational guidance program are not well developed in the school system. In a comprehensive program of vocational guidance it is well to keep the vocational counseling function and the placement function fairly distinct.

It is, to be sure, part of the work of the placement worker to counsel the applicant concerning specific employment opportunities as they relate to his choice of occupation and his personality. It is inevitable that at times some discussion will take place between the two as to the suitability of the choice of occupation, particularly in connection with second and later placements. But the placement worker should recognize always that his job deals primarily with *advantageous entry* of the youth into an occupation already chosen. It is the duty of the school from which the youth comes to help him make the choice.

The school which has him under its supervision 6 hours a day for several years, which directs his study of occupations, which provides him with tryout experiences, which has a counselor to gather and study data concerning his physical, mental, social, and temperamental characteristics and to help him interpret occupational information and tryout experiences in relation to his personal qualities and limitations, is much more able to do this than is a placement worker who sees him for a few minutes on one or two or even half a dozen occasions. On this account it is usually better for the placement worker to send back to the counselor from whom he came any youth whose choice of occupation seems unsuitable, whether this is discovered at the time of the first interview or in connection with a second, third, or even later placement. In every case of this sort the placement

worker should send the counselor a statement of his reasons for coming to the conclusion that the choice is unsuitable, especially any information from the youth's employers which bears on the subject.

SUMMARY

A vocational guidance program is incomplete—unfinished—if it does not include a placement service. Entering occupational life advantageously, getting off to a good start, is quite as important as choosing and preparing for a suitable occupation. The placement office of a school system helps youth to sell their services in a favorable market. Well administered, it strengthens the rest of the program and builds up the prestige of the schools in the community.

The federal-state employment service is assuming the task of placing youth as well as adults. Better financed than school placement offices, closer to employment, and possessing an integrated organization that covers the entire country, this service has certain advantages. On the other hand, school people know the youth of the community, are trained to work with youth, are unhampered by political considerations, and can more easily obtain any needed additional information concerning employment opportunities than they can pass on to public employment offices the needed information concerning the youth of the community. Besides, transfer from school to occupational activities is essentially an *educational service*, concerned with making sure that youth are so placed that their development, carried on for years in the schools, is continued in the early years of employment life. Better results for youth, for the schools, and for society seem assured if placement of youth to twenty-one years of age, perhaps to twenty-five, is recognized as a function of the school system with financial and other assistance from the federal-state employment service. Cordial cooperation between these two agencies is necessary, however the job is done.

Placement is not mere job finding. It is a complicated and discriminating undertaking. It involves conferences between the youth and his school counselor, a report by the counselor to the placement office, interviews by the placement worker with the youth, calls by the youth on prospective employers, reports from the youth and the prospective employer to the placement

office, reports from placement office to counselor, additional placements and additional conferences and reports if necessary or desirable. All these activities call for careful planning and well-considered techniques. Often special training in how to apply for a job, even a particular job, is required. In all of this the interests of youth are paramount but the interests of employers demand consideration also.

One central placement office for the school system better opens employment opportunities of the entire city to youth and is more convenient for employers. Placement of youth as they leave school, a task of large proportions, is unevenly distributed during the year. Efforts to spread the work more evenly have met with only moderate success. The Adjustment Institute described in the next chapter should be helpful in this task. The placement worker does some counseling but with reference to the individual youth's fitness for a particular job rather than concerning choice of an occupation. If a change in choice of occupation seems desirable for a youth seeking placement, that youth's school counselor may well be called upon for assistance.

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CHAPTER XVI

THE FOLLOW-UP OR ADJUSTMENT SERVICE

Important as an efficient placement service is in helping youth get off to a good start in occupational life, it is quite apparent that further assistance is needed in making adjustments and taking advantage of opportunities in the months that follow induction into employment. This further assistance has been called the follow-up or adjustment service.

Determining adjustment needs. If a service of this kind is to function in a comprehensive and genuinely helpful manner some systematic procedure for ascertaining the needs of young workers is necessary. It cannot be taken for granted that each one who has been placed will discover these needs for himself and come back uninvited to the placement office for assistance in meeting them. To be sure, in case the need is for a new job, he probably will come back if the placement office served him well in the first place. But the young worker has many other needs, as will be seen more clearly later. He may be painfully conscious of some of these, dimly conscious of others, and wholly unconscious of others. And, naturally, the needs will differ and the consciousness of them on the part of different individuals.

Reference was made in the previous chapter to reports to be filed with the placement office by the youth and by the employer immediately after employment begins. Another report from the youth at the end of the first month covering a description of his duties, further preparation needed for the work, how he gets on with his boss and with his fellow workers, agreeable and disagreeable features of the job, and how he uses his leisure time would be one valuable means of arriving at the youth's adjustment needs. Similar reports after four months, one year, and possibly two years would be helpful. Of course, reports from the employer covering such matters as the adequacy of the young worker's preparation, specific further preparation needed, his attitudes, his relations with fellow workers, and opportunities that lie ahead would be of great value.

Another method of arriving at the adjustment needs of young workers involves calls at their places of employment by representatives of the school system for the purpose of observing their work and making brief inquiries of their foremen or supervisors. Many placement offices depend largely and some wholly on telephone calls in obtaining the desired information. Valuable as telephone calls may be in the follow-up service, they alone cannot possibly take the place of the more carefully considered written reports and the personal calls just mentioned. And, to be sure, an important means of determining needs of young workers will always be the personal calls they themselves make at the offices of their former vocational counselors and other members of the school system's staff. If proper arrangements for such calls are made many employed youth will take advantage of them. Fitch reports one placement secretary attached to a large vocational school who never places a graduate in the first job without inducing him to agree that he will not quit of his own accord without first consulting her.¹

At once objections are raised to the difficulties and the expense encountered in obtaining this needed information. It is argued that neither the young worker nor the employer will take the trouble to file written reports, even though forms for the purpose and return postage are provided; and calls at places of employment by representatives of the placement office are out of the question because of the expense to the school system and the inconvenience to employers.

A company manufacturing automobiles finds it not only possible but profitable to spend a large sum of money each year in providing free service for a time on every car it turns out. After driving a new car 1,000 miles the purchaser is asked to bring it in for a free inspection and to report any defects that he has discovered. He is expected to do the same thing again when the car has completed 2,000 miles. Any defective parts discovered or any adjustments needed within the first three months or 4,000 miles (whichever is reached first) are cared for by the manufacturer without charge to the purchaser. In other words, automobile companies consider it good business to make ample provisions for following up their product, as well as for producing

¹ JOHN A. FITCH, *Vocational Guidance in Action*, p. 143, New York: Columbia University Press, 1935.

and selling (or placing) it. They are so much concerned about how their product performs and how it pleases their public that they are willing to spend freely on this follow-up service.

Surely youth deserve as much consideration on the part of the social institution which prepares them to function in an adult society, especially when it is realized that the first few years of this functioning really contribute enormously to the very process of education which the schools have been fostering in these same youth. Ultimately the schools must be expected to go to great pains and expense in order to perform a comprehensive follow-up service for their product. This service will no doubt concern itself with other aspects of life as well as with vocational adjustments.

It is not enough, however, to depend wholly on formal reports from young workers and their employers, on telephone and personal calls on employers by representatives of the school system, and on calls at counselors' offices by the young people concerned, valuable as these may be. A former principal, vocational counselor, home-room teacher, subject teacher, or athletic coach may pick up in chance or planned conversation with a young worker information concerning his occupational adjustment problems that is very significant. Certainly much more can be done than is done at present in bringing together for study and analysis such information of this nature as is gathered by various members of the school staff. Every member of the staff might well feel obligated both to be on the alert for such information and to file it in written form with the youth's former vocational counselor. And similar information gathered in like manner from employers of these former students will prove of great value also.

Fundamental to the effective working of any follow-up procedure in determining the needs of young workers is an entire program of vocational guidance that wins and holds their confidence and cooperation by means of valuable services rendered. A youth who is convinced that he has been helped in choosing a suitable vocation, in making needed preparation for it, and in obtaining his first position is much more ready to send in reports or make them in person when requested to do so than is one who considers that he benefited little from these earlier services of the program.

In like manner, an employer who is pleased with the young workers who have come to him through the placement service and who has been called upon to supply the schools with occupational information or to help in working out a vocational education program for his industry is much more ready to report concerning the young workers in his employ than is the employer whose relations with the school system have left him with an unfavorable impression of that institution. Whatever procedure is used in determining follow-up needs must be based on other vocational guidance services that are really functioning.

The need in connection with a second or later placement. As suggested earlier, the one need which is most likely to bring a young worker back to the placement office is that for help in finding a new job. But beneath this immediate need is that for assistance in analyzing the situation in which he finds himself. Why is he out of a job? Did he quit voluntarily because he disliked the work? While the work itself was satisfactory, did the working conditions cause him to decide on a change? Did his employer discharge him? If so, was it because of inefficiency, wrong attitudes, general reduction of the working force? Did the employer fail in business? Is a labor strike responsible? In the light of the reason for his unemployment and of his work experience, will it be easier or harder to get a new job? Should he try for a new job in the same occupation or in a new one? The kind of assistance that a youth receives in this critical experience may affect favorably or unfavorably his entire working life. Of course, he should understand, before assistance is given him in finding a new job, that the reasons for his leaving the former one have been investigated carefully from his employer's point of view as well as from his own and have been entered upon his record in the placement office.

Need for help in leaving a job that is no longer desirable. As has been pointed out, it is quite as true that some young workers remain in jobs longer than they should as it is that many shift from one job to another when they should not. The former are just as much in need of help as the latter in meeting a situation that may have great significance for them. Fear of change, unwillingness to take a chance, and especially ignorance of how to proceed in seeking opportunities for advancement often condemn a capable individual to a level of achievement much below

his possibilities. Sometimes the best opportunity is to be found in the very organization that already employs this young worker. A placement office can do much to remedy this situation by providing an opportunity for individuals of this type to review from time to time with a specialist their occupational problems, and by keeping them aware of the assistance afforded by the vocational guidance program of the school system in obtaining a position better suited to their abilities.

Need for help in removing causes of dissatisfaction. Not infrequently a young worker who is getting on reasonably well, is satisfactory to his employer, and should remain where he is, develops a real or imaginary grievance which interferes with his usefulness and threatens to result in a change to a less desirable job. A machinist's apprentice in New York who had been called to account for some mistake decided that his foreman "had it in for him" and that the best thing for him to do was to find another job as soon as possible. Another machinist's apprentice discovered that a young worker near him doing piecework was earning twice as much as he, and immediately decided that he would give up his apprenticeship and change to piecework. Fortunately both of these youths were persuaded by friendly coordinators from the schools that their reasons for proposing to give up their opportunities to learn a highly skilled trade were trivial. Whatever the cause of dissatisfaction, the kind of follow-up service which helps the young worker to see the situation as it really is and to face it squarely often measures the difference between success and failure for that young worker.

Need for additional vocational preparation. Every young worker on a new job, regardless of his vocational preparation before leaving school, has much to learn concerning his work and his new relationships. In some cases this is learned entirely in the place of employment; in other cases, partly in the place of employment and partly elsewhere. Of course, both the amount and the nature of the new skills and knowledge required depend on the kind of work done, being much greater for a machinist's apprentice or a stenographer than for a punch-press operator or a file clerk.

Many young workers are very slow in discovering just what they need to learn and still slower in finding quick and economical ways of learning it. They need help to see their learning needs

and the opportunities that lie around them, both in connection with their employment and outside of it, for meeting these needs. What evening courses and correspondence courses pertaining to the work are available; what readings and what conferences with individuals are desirable; what habits of observation and of work and what attitudes should be cultivated in order better to meet present and probable future requirements of the job are questions which they need help in answering. They also need encouragement to take advantage of the various opportunities at hand for self-improvement in the field of their vocations.

Need for help in planning cultural, recreational, and community-service activities. Not only are these youth beginning their duties and responsibilities as workers. They are beginning also to assume their places in society as citizens. As they leave full-time school, profound changes are taking place in the manner and extent of their use of the provisions available for their cultural, social, and civic development. They are modifying the recreational habits of their school days on account of the requirements of their work. Habits of participation in community-service activities become fixed—crystallize—more in the first few years of employment than at any other period in the individual's life. A new set of personal relations problems demand attention. Adjustments of vital significance to the young worker's satisfactions in life and to his value as a member of society in his community must be made. Many of these adjustments are closely related to his vocational success. A wise follow-up at this time by the same social institution that society has charged with responsibility for helping to prepare him in advance for this situation is immeasurably valuable both to the youth and to society, and, as was noted in case of the placement service, to the school system also.

Need in case of prolonged unemployment. If the youth in his early years of employment has need of such follow-up services as have just been discussed, certainly the one who has been seeking work for weeks or months without success is in even greater need, whether he has held a job for a time or whether he has had no work since leaving school. The greatest tragedy of a prolonged period of economic depression is its crop of unemployed youth. In such periods the obligation rests more heavily on the school system to look after its former students if their morale

is to be preserved and they are to become permanent social assets rather than social liabilities.

The Civilian Conservation Corps as a factor in meeting the needs of unemployed youth. It was for part of this group that the Civilian Conservation Corps was organized by the federal government in 1933. The camps of this corps, each accommodating on the average about 200 young men from seventeen to twenty-three years of age (the typical enrollee was 18.5 years of age in 1938), are scattered throughout the different states and provide for approximately 300,000 youth at one time. With their favorable living conditions, work program, and expanding educational facilities, these camps have undoubtedly been of great value to those enrolled.

Vocational classes are carried on in each camp for enrollees who wish to attend, under the leadership of an educational adviser who, in many camps, provides also a limited though expanding vocational guidance service. Better health, better morale, and some vocational preparation have resulted. However, these camps are open only to boys and young men; no corresponding provision is made for girls and young women. The number who can be accommodated is only a fraction of the total number of unemployed youth, estimated by the American Youth Commission in 1936 as $5\frac{1}{2}$ million and in 1939 as nearly 4 million between the ages of sixteen and twenty-four inclusive. The educational program provided, valuable as it has proved to be, is meager compared with the needs of the group. The period of enrollment is six months with the privilege of renewal for three additional periods of six months each. However, each reenrollment bars a new youth from coming into the Civilian Conservation Corps, since the total membership is fixed by law. When the period of enrollment is over, most of these youth, who have been taken out of their natural environment for a time, return to the conditions from which they came, including usually unemployment.

The entire program is controlled and managed from Washington, with the result that the communities from which these youth come tend more and more to unload their responsibilities for meeting the needs of their own young people on the federal government. Fundamentally the problem with which this chapter is concerned is a local educational and guidance problem, while that of the C.C.C. started out as one of human relief and

conservation of forest resources. It is not to be expected that a partial solution of the latter problem will solve or even make a large contribution toward solving the former. Even with steadily increasing emphasis on the educational and guidance services of C.C.C. camps and lessened emphasis on their relief character, this valuable organization cannot be expected to take the place of local communities in serving the needs of unemployed youth.

The National Youth Administration as a factor. Another organization which has done much valuable work with unemployed youth is the National Youth Administration. In 1935, in accordance with an executive order issued by President Roosevelt, the National Youth Administration took over the Federal Emergency Relief Administration's program of aid for needy college students, started the previous year, and extended it downward to include students in secondary schools and upward to include graduate students in universities. By means of this aid, amounting to not more than \$6 per month for high school students, \$20 per month for college students, and \$40 per month for graduate students, many thousands of youth, sixteen to twenty-four years of age, have continued their education. In return for this aid, students work at tasks varying according to their knowledge and skills, mostly in connection with the educational institutions which they attend.

For unemployed youth, eighteen to twenty-four years of age inclusive, who are no longer in school, N.Y.A. part-time work projects are carried on which do not compete with adult labor and which give these young people a small income. In addition the National Youth Administration in some communities has provided junior counseling and placement services in connection with state employment offices in an effort to help these youth find jobs in private industry.¹

Hayes has pointed out that a personnel card has been developed for out-of-school youth applying for N.Y.A. work; the work projects provide limited tryout experiences; in certain of the large industrial states occupational information material has been prepared and late afternoon and evening classes for study and discussion of this material established for unemployed youth; and in some centers consultation services of vocational counseling

¹ RICHARD R. BROWN, "The NYA and the Youth Problem," *Occupations: The Vocational Guidance Magazine*, XIV (May, 1936), 776-780.

type have been set up by the N.Y.A. for these youth.¹ Also, a number of residence centers have been established in which a combined program of part-time work and part-time vocational education is provided for groups of N.Y.A. youth.

This program provides for both sexes, serves youth for the most part in their home-community environments, and, in some localities, undertakes to provide a comprehensive vocational guidance service. While directed from Washington, it has also a staff in each state which seeks the cooperation of state and local educational authorities. In the student-aid part of the program the local educational institution is allowed freedom in selection of students and types of work in which they engage.

However, this is primarily a relief program. Students who receive aid must show that they could not continue their education without aid. Those employed on N.Y.A. work projects are "Needy young men and women between the ages of 18 and 24, inclusive, who are out of school and unemployed," according to a statement issued by the National Youth Administration in 1940. An earlier requirement was that at least 90 per cent of these youth must come from families on relief. Some of the best features of the program are found only in a few communities and on an experimental basis. Only a fraction of unemployed youth are receiving through the N.Y.A. follow-up service that even approaches adequacy.² As with the C.C.C., the entire setup tends to cause local educational authorities to shift to the broad shoulders of Uncle Sam responsibility for following up these youth instead of recognizing this as a responsibility of the local school system, concerned directly with the continued education of its former students.

No coordinated program. It is apparent that there is no coordinated program aimed at following up and helping unemployed youth and no agency which feels responsibility for bringing about such a program. The high schools look upon these youth as beyond their jurisdiction. The C.C.C. serves certain of the needs of a small part of this group for a time but finally sends these back, for the most part still unemployed, to the com-

¹ MARY H. S. HAYES, "NYA Youth Placement," *Occupations: The Vocational Guidance Magazine*, XVI (May, 1938), 737-738.

² The N.Y.A. reports that, as of May, 1938, 326,664 young people were receiving student aid and 179,367 were on work projects.

munities from which they came. The N.Y.A. saves some of the abler and more ambitious ones from joining the unemployed by its student aid program and helps a few of the unemployed with its work projects and with vocational guidance. The junior placement service of the state employment offices offers assistance in finding such jobs as are available. Interested local social agencies make contributions of some value to the problem. But all these organizations and agencies are working almost entirely independently of each other. The result is that great numbers of these youth receive little or no help and others receive help in meeting only part of the difficulties that perplex them.

A new type of local educational institution needed—an Adjustment Institute. In reply to the criticisms voiced concerning the limited service of the C.C.C. and the N.Y.A., it can be said that local school systems of this country are doing far less in the way of providing an adequate follow-up service for unemployed youth than either of these federal agencies; and that these organizations have done a great service in focusing attention on the problem and in taking steps toward its solution. No doubt this is true as far as the unemployed group is concerned, but neither of these agencies does any follow-up work with those who are employed from the time they leave school or with those who enter higher educational institutions, except that the N.Y.A. provides financial aid for some needy students.

As a matter of fact, school systems as now organized cannot be expected to do effective follow-up work with any of these groups. A new educational institution, very different from the junior or senior high school or junior college, and designed for a much broader service than is performed by placement offices—a sort of Adjustment Institute—is needed, into which all youth are transferred when they leave secondary school just as they are now transferred from junior to senior high school.

The business of this new institution would be to help each youth make the adjustments that are essential to his continued development during the first few years after leaving secondary school. Some youth would flow out from this institution almost immediately into employment and others into colleges or other educational institutions. Some would remain for months or even years full-time members of the Adjustment Institute, because of inability to obtain employment or to enter college. Others might

go out for a few months into C.C.C. camps, or into part-time private employment. But whichever of these various courses was pursued by an individual, he would still be considered a member of the Adjustment Institute until he reaches twenty-one (perhaps twenty-five) years of age. He would be expected to look to this institution for any kind of help needed in meeting new situations or in making better adjustments to old ones. And the institution would be expected to help him to discover these needs as well as to meet them.

Services of the Adjustment Institute to those entering employment. The first service of the institute to this group would be that of assisting them to find suitable employment. In other words, the placement office, whose work was discussed in Chap. XV, would constitute an important part of the institute and the entire placement service of the school system would center here. Of course, this office would concern itself with second and later placements as these became necessary. The institute would concern itself also with those who tend to remain longer than they should in positions which do not afford opportunities commensurate with their abilities.

The need of each employed member of the institute for help in connection with his vocational, recreational, cultural, and community-service activities—the entire range of follow-up services for the employed described earlier in this chapter—would claim the attention of the institute. A broad program of part-time and evening classes would be necessary, as would also provision for counseling concerning correspondence courses available, and supervising correspondence study. As far as employed youth is concerned, the job of the institute would be to know each individual and to contribute in every possible way to his vocational success and to his continued development.

Services of the Adjustment Institute to those entering other educational institutions. The institute would help those who are planning to continue their formal education to select institutions, curriculums, and subjects suitable to their abilities, aptitudes, and needs, beginning this work before high school graduation. It would help them in gaining admission to the chosen institution or, if denied admission there, to some other institution equally suitable. It would assist them in planning their living arrangements, recreations, extracurricular activities,

and time budget for the first year in the light of information gathered concerning each one during his years in the local schools. It would encourage them to come in to report and talk over their problems when home on vacations. It would receive reports at intervals from the institutions attended concerning the quality of work these young people were doing and concerning special needs of particular individuals. It would administer any scholarship and loan funds available for graduates of local high schools and endeavor to obtain additional funds for the aid of worthy students. It would help other capable and ambitious students to work out plans for self-support while continuing their education. And it would assist those who drop out of college to make and carry out new plans.

Services of the Adjustment Institute to unemployed youth.

The unemployed group requires a more varied program of assistance than either of the others. The institute would, of course, register for placement all who were seeking jobs and would concern itself constantly with finding employment for them in private industry or business. It would select from this group candidates for assignment to C.C.C. camps and receive these back into its fold again when they leave such assignments.¹

The institute might well take over the entire N.Y.A. program in its community and should by all means develop and carry on work projects aided by federal funds as is now done by N.Y.A. All such projects would be of a community-service nature, projects which do not interfere with employment of adults and which provide, say, 10 hours of work per week for any unemployed youth whether or not he or she comes from a family that is on relief. As suggested some years ago by the writer, one project might be a survey of recreational opportunities and needs in the community with a list of practicable things to be done in order to improve recreational facilities. Another project might be a survey of community-service opportunities and needs, with a similar list of things that ought to be done for the improvement of community life.² These two surveys would yield many suit-

¹ As employment conditions improve, part of the more than \$300,000,000 per year now spent on C.C.C. work could be used profitably in maintaining these community adjustment institutes, thus serving all youth in their home environments.

² GEORGE E. MYERS, "What of Unemployed Youth?" *Education*, LV (April, 1935), 470.

able work projects for assignment to members of the group. Naturally records of the part-time work for each youth would be kept as a basis for recommendation for full-time employment later.

All who participate in the work program would be expected to spend a fixed number of hours per week, perhaps 20, in an educational, recreational, and unpaid community-service program provided by the institute, and determined in accordance with individual needs and abilities. Vocational education, preceded and accompanied by vocational counseling, should be a part of this program. General education, for some of a cultural type, and for all of a type growing out of and related to their 10 hours of work per week and current economic and social conditions, would also form a part. Voluntary community service of types that could not properly be brought into the work program would likewise be included, as would physical and social recreation.

The Adjustment Institute's place in the community. The Adjustment Institute would thus constitute in each community an agency that would be responsible for serving in a comprehensive manner the adjustment needs of all youth who leave the secondary schools of that community. It might properly exchange courtesies with similar institutes in other communities as youth move from one community to another. As part of the public school system, it would be in position to gain the cooperation of other local social agencies interested in youth and to serve as the coordinating agency for these as far as adjustment problems are concerned. With responsibility for placement, for part-time work with pay if full-time work is not available, and for the many other services discussed above, it should promptly win the confidence and support of both youth and adults if its work is well done. It would come to be looked upon as the community's own agency for continuing the educational program of its elementary and secondary schools and for building a better community in the future as well as for aiding youth to find their way into the activities of adult life.

Adjustment a neglected service. As one reads the literature of vocational guidance and especially as one notes how little follow-up or adjustment work is done by city school systems, even by those that have developed the better programs of vocational guidance, he is obliged to admit that here is a much neglected service. Whatever arrangements are made for carrying

it on in the future, whether by adjustment institutes or in other ways, assistance to youth comparable to that proposed through the Adjustment Institute must be recognized as a fundamental part of a comprehensive program of vocational guidance, and far more adequate provisions must be made for carrying it on than have yet been given serious consideration.

SUMMARY

If the follow-up service is to be performed effectively for employed youth, a plan for determining the adjustment needs of young workers is necessary. Written reports from the employer and from the young worker are desirable but difficult to obtain. Telephone calls to the employer and especially personal calls at the place of employment by a representative of the placement office are helpful. Calls made by the youth on his former school counselor have value and should be encouraged. All members of the staff of the school formerly attended by the youth may well be requested to turn in reports of informal talks with him concerning his work and his needs related to that work. When other parts of the program of vocational guidance are working well, both the youth and his employer are more ready to cooperate in supplying the desired information.

Among the most important adjustment needs of a young worker are: assistance in obtaining a new job, because he has lost one or because it is time for him to move on to something better; help in removing causes of dissatisfaction; aid in determining what additional preparation should be obtained and how and where to obtain it; help in planning desirable cultural, recreational, and community-service activities; and help in meeting the discouragements of prolonged unemployment. While the Civilian Conservation Corps and the National Youth Administration are rendering valuable follow-up service to a considerable number of unemployed youth, it must be recognized that these agencies deal only with the unemployed, with only a relatively small part of these, with only part of their adjustment needs, and for only a limited time. The great problem of adjustment of American youth must be attacked by some other agency or agencies. Other social agencies are attacking it in various ways but there is no coordinated program or plan of attack.

A new type of local educational institution is needed to take responsibility for the occupational and other adjustments of

CHAPTER XVII

THE RESEARCH SERVICE

The eighth and last of the services of a comprehensive vocational guidance program listed in Chap. VII is the research service. The term "research" as here used includes studies and investigations of various kinds pertaining to local programs of vocational guidance.

To be sure, small school systems will find it difficult to do much that deserves the name of research in this field because of limited staff and funds. On the other hand, the amount of this type of service needed is determined by the size of the school system, the small system requiring less. But no school system that carries on a vocational guidance program, however limited, can afford to neglect the research service entirely. Often a faculty member of a higher educational institution may be called in to assist members of the local staff in this work.

Purposes of the research service. The chief purpose of this service is, of course, to improve the effectiveness of the other services and of the program as a whole, and to aid in adapting these to changing conditions. However carefully planned the program may be, its continued effectiveness will depend upon the care and thoroughness with which the methods and techniques of the various services are checked from time to time, experiments with different methods are carried out, and new devices are developed to meet new situations.

A second and more remote purpose of this service is to cooperate with other agencies in the solution of problems of national or regional interest in the field of vocational guidance. In the main, research work on such problems will be done by agencies of national scope like the U.S. Office of Education, the U.S. Bureau of Employment Security, the National Vocational Guidance Association, and private foundations. For example, as pointed out in an earlier chapter, no other agency is in so favorable a position as the U.S. Bureau of Employment Security to devise standardized tests of occupational proficiency. But the

research service of a city program of vocational guidance may properly be expected to cooperate with the U.S. Bureau of Employment Security in validating these tests for use with students completing the vocational preparation provided by the schools.

Research in occupational information. Obviously the occupational information used in classwork, in counseling, and as reference material must be accurate, reliable, significant, and up to date. It must also fit the community in which it is used. National organizations have carried on extensive investigations in this field and have developed a mass of material descriptive of a wide range of occupations. Especially has the U.S. Bureau of Employment Security been very active in this respect recently, publishing descriptions of thousands of jobs. The National Vocational Guidance Association has done important work in developing techniques of occupational research and in illustrating their use. Numerous other agencies also have prepared and published occupational information material.

As far as practicable any local vocational guidance program would draw on the wealth of available material. But it sometimes happens that an occupation as carried on locally differs from the same occupation in some respects as it is described in literature for national circulation. Still more is it true that some occupations are local in character and, therefore, have not been investigated and described by agencies interested in preparing material for use in wide areas.

It is the business of the research service of a local program of vocational guidance to make sure that imported material describing common occupations carried on in the community fits local conditions, and to prepare material covering the more important occupations that are peculiar to the local community. Continuing research is necessary if occupational information material is to give an adequate understanding of the opportunities and requirements of local occupations as well as a general picture of those that are most important nationally. The problem is one of checking and supplementing available standard descriptions of occupations in terms of local conditions when these conditions differ from national norms.

Another type of research in this field which pays dividends if well done is that which is concerned with methods of aiding youth

to gain a functioning knowledge of the occupational information available. Controlled experiments in different methods of teaching this subject aimed at determining which is the better, not only with respect to the amount of information acquired by the students but also with reference to the influence of this information on their occupational plans, are quite possible and practicable in some school systems, especially in larger ones. If members of the staff concerned with vocational guidance do not have the training or the time to carry through such studies, university professors and graduate students can be found who will appreciate an opportunity to work on this problem in cooperation with school authorities who have a genuine interest in it.

Research in occupational exploration. In Chap. VIII suggestions were presented which were aimed at increasing the values of secondary school work as a means of helping youth discover their aptitudes, interests, and limitations. It was proposed that teachers in secondary schools be made more conscious of the exploratory possibilities of their subjects; that a larger number of the elements that go to make up an occupation be introduced into the school experiences that are supposed to be exploratory for that occupation; that in case of those courses which especially stress vocational exploration, the methods of teaching and class management bring in more features of the working environment of the occupations represented; and that more attention be given to the exploratory values of extracurricular activities and part-time employment. But if these suggestions are carried out to the best advantage, numerous investigations are necessary.

How can high school teachers be made properly conscious of the fact that they are not only teaching subjects to the students in their classes but that they are also helping these same students to discover their own assets and liabilities through the subjects taught? Different ways of creating and developing on the part of teachers appreciation of the exploratory function of education must be tried out experimentally before the best way is determined. The best way in one school system may not be the best way in another, because of differences in the teaching personnel and other influencing factors.

Once this appreciation is developed, problems of selection of new material to be added to the courses of study in the various subjects claim attention. If, as suggested above, more elements

of experience from the occupation for which a particular subject is exploratory are to be brought into the course of study in that subject, which of the many possible elements shall be selected? For example, if the general shop course in any particular school is to be enriched in this way, what operations or processes of carpentry, electrical work, metalwork, printing, and other industrial occupations should be added? If the subject is chemistry, what more should be brought in from the work of industrial chemists? Or if English, what additional experiences in news reporting, editorial, feature, story, and other forms of writing, and in the teaching of English shall be incorporated? Of course, the answers will differ according to what is already in the courses of study and, perhaps, according to the occupational activities of the community. But the point stressed here is that investigation—research—is necessary in arriving at satisfactory answers to these questions.

Equally true is it that methods of teaching and class management require critical examination in regard to their part in realizing the exploratory function of education. Experiments in teaching the same material by different methods need to be tried and the results evaluated as nearly as possible. The values of different kinds of instruction sheets and the conditions favorable to the use of each kind call for investigation. The practice of dividing industrial arts classes into groups with a student foreman in charge of each group, thus approximating an important feature of industrial management, needs evaluation. This, or something akin to it, might also be tried in other high school subjects. Though measuring the effects of different methods of teaching and class management with reference to realization of the exploratory objective is admittedly a difficult undertaking, research along these lines also is highly desirable.

If content of courses and methods of teaching are modified in order to bring about better results in exploration, checks are desirable to make sure that other values of the work are not sacrificed. This, again, is a research problem. While many believe that these other values are increased rather than lessened, beliefs and opinions are, of course, not satisfactory evidence.

Then, too, a great deal of experimentation and research is needed in connection with extracurricular activities in relation to vocational exploration. Some of the questions which call for

answers in particular schools are: How comprehensive a program of extracurricular activities is desirable? To what extent should the exploratory purpose be stressed in each of these? How does each activity now contribute to vocational exploration? What modifications in its yearly program are desirable if its exploratory value is to be increased? What type of faculty sponsorship is preferable? None of these are questions to be answered by the snap judgment of the principal or of a committee of teachers.

Finally, experimentation with vocational exploration by means of part-time employment and evaluation of experiments of this type deserve to be included in the research service of a comprehensive program of vocational guidance.

Research in gathering personal data. It was noted in earlier chapters that in counseling an individual as complete information as can be brought together concerning his personal assets and liabilities is essential. It was pointed out that gathering much of this information is the function of other divisions of the student-personnel organization and that the vocational guidance division is concerned with using the information wisely. Accordingly, giving and scoring intelligence tests, aptitude tests, and tests of personality traits belong to the bureau of tests and measurements, psychological clinic, or other division, by whatever name it is known, which does this type of work for the school system as a whole. In like manner, the health department supplies physical data concerning the student; the attendance department and visiting teachers, data concerning his social environment; and subject teachers, his scholastic record.

However, assembling this material in convenient form for use in counseling, checking it for completeness and adequacy for its intended use, and keeping it up to date are proper functions of the personal data collecting service of the vocational guidance program. Investigations for the purpose of determining the best methods of obtaining the desired reports from the various sources, and other investigations to determine suitable record forms for compiling the information gathered in these reports, always with reference to the scope of the local guidance program, are desirable. Also, cooperation with other services of the program in validating tests, in determining the worth of rating scales, and the like should be expected.

Research in counseling. Here again the problem is largely one of studying and evaluating different methods and techniques in dealing with different types of individuals as revealed to the counselor by their records and by earlier interviews with them. The adequacy of the records available; how best to use these records; how best to use the interview period; what methods are most successful in bringing back former students for counseling interviews; these and similar matters will claim attention and require investigation.

Attention may well be given to measuring the effectiveness of different counselors and to determining what qualities are most essential to good counseling and how these differ with different types of youth in the school system. The possibility and desirability of using home-room teachers and subject teachers for certain counseling responsibilities deserve investigation, and how the counseling activities of different members of the staff fit into the school counseling service as a whole.

Research in vocational preparation. Among the many questions demanding investigation are: For what occupations should the school system provide preparation? What kind of preparation is needed for these occupations? What part of this preparation should be provided in all-day classes, what part in part-time classes, what part in evening classes, and what part wholly in employment? What provision is already made in the community for this preparation by public schools, private schools, employers? Obviously, a thorough vocational education survey, such as was suggested in Chap. XIV, is necessary in order to answer these questions.

Here again, even more than in case of occupational exploration, the selection of content for every subject taught calls for occupational analysis and investigation and selection of related technical, social, and economic material if the subject is to serve its purpose effectively. And this investigation must concern itself with keeping the content in line with changes in industry and business.

Methods and techniques used in teaching and class management also require study, as do opportunities for cooperation with employers in providing the needed vocational preparation.

Nor is it safe to assume that all who enter certain vocational preparatory classes should be there, however efficient the earlier

parts of the guidance program may be considered. Studies of the performance, interest, and attitudes of vocational students need to be made from time to time, not only as a service to the students but also as a check on the adequacy of the vocational guidance they have received thus far.

Research in placement. An efficient placement service depends, among other things, on up-to-date information concerning the general types of work open to youth. The surveys of high school graduates made from time to time in Minneapolis¹ and that made in Philadelphia² in 1935 were of distinct value in this respect to the placement work of those cities. Since conditions differ in different cities and at different times in the same city, such surveys need to be made by all school systems that stress placement and need to be repeated at intervals. There is no better way of ascertaining the kinds of work which are open to youth leaving school and the number of youth required for each kind than by finding out what those youth are doing who have left school recently.

Of course, the placement service must continually investigate specific employment opportunities. It must learn just what firms need young workers today, or tomorrow, or next week, how many each firm needs, the qualifications required for each position to be filled, the wholesomeness of working conditions, and opportunities for advancement offered by the position. Its selection of youth to apply for particular positions will be better if it studies the idiosyncrasies of each employing officer with whom it deals frequently and then sends only such youth as possess personality characteristics that seem likely to please that officer.

Other matters that call for investigation are techniques of conducting placement interviews, methods of establishing wholesome relationships with employers, possibilities of cooperation with the local office of the state employment service and with school or other public placement services in neighboring cities. The possibilities of obtaining objective data concerning appli-

¹ BARBARA H. WRIGHT, "A Follow-up of 1934 Graduates," *Occupations: The Vocational Guidance Magazine*, XV (October, 1936), 42-45.

² ANN PAVAN, "A Follow-up Study of Philadelphia Public School Graduates," *Occupations: The Vocational Guidance Magazine*, XVI (December, 1937), 252-259.

cants by means of standardized tests of occupational proficiency deserve attention also. In some of the larger cities it may be desirable for the placement service to cooperate with the state and federal employment services in developing such tests.

Research in follow-up. As indicated in Chap. XVI, both the nature and the effectiveness of the follow-up service needed by a particular youth depend upon a clear understanding of the adjustment problems faced by that youth. The follow-up service is an individual service. It calls for study of the individual in beyond-the-school situations, as well as interpretation of information gathered concerning him while he is in school. The types of information sought in that study have already been discussed sufficiently to suggest its scope.

Investigation and evaluation of various methods of determining the adjustment needs of individual youth are desirable, as are also investigation and evaluation of techniques used in serving these needs. Since very little has yet been done along these lines, great opportunities for important research will be found here. A local survey of opportunities for part-time employment on community-service projects that will not bring unemployed youth into competition with adult labor, investigation of ways in which work experiences may be made to yield their maximum contribution to development of the young worker, and study of the possibilities of cooperation with various other agencies in performing the follow-up service are a few of the many research problems that challenge consideration in this field.

Research pertaining to the effectiveness of the program as a whole. The question is often asked: What evidence is there that youth who have been subjected to a comprehensive program of vocational guidance are any more successful or happy in their occupational life because of this experience? As Cole expresses it:

Is there any justification for calling guidance a fad? Are there any proofs that vocational guidance scientifically carried out can be made to pay large dividends? Can the professional vocational guidance men prove to industry and to society as a whole that their program is practical, effective, and above all that it brings results? Can they prove to the business man that vocational guidance reduces labor turnover, makes for happier and more contented workers, increases effi-

ciency, and reduces cost of production? In short, can a vocational guidance director prove that his work is bearing worthy results?¹

The vocational guidance staff of many school systems could carry through investigations, similar to the one made by Cole, for the purpose of answering these and other questions. Certainly scientific evidence on its effectiveness, whether favorable or unfavorable, would be of great value to the vocational guidance program of any city. But great care must be taken to be sure that the evidence is scientific.

A significant investigation of this general character, financed by a private foundation, is now in progress in the city schools of Flint, Mich. Two groups of ninth-grade pupils of the Emerson Junior High School, 234 in each group, were chosen for the investigation. The experimental group has the benefit of a carefully planned program of guidance conducted by psychologists and trained counselors, while the control group is provided only with such general guidance services as are common to many school systems when no special guidance workers are employed. The investigation, planned for a five-year period, is at this writing starting its second year. An evaluation of results is to be made at the conclusion of the five-year period.

Coordinating research and research results. Obviously some of the studies and investigations mentioned in this chapter are of interest to more than one of the vocational guidance services. For example, information obtained in research related to placement is of value also to the counseling and follow-up services. Some of that obtained in research pertaining to vocational preparation is useful in the occupational exploration part of the program. It is to be expected that when any study is undertaken its relations to the different services will be given proper consideration in the provisions made both for conducting the study and for distributing its results. In other words, complete coordination of the research activities is essential.

In this connection it may be well to note that similar coordination between the research activities of the psychological clinic, the health service, and other branches of the student personnel department of the school system and that of the vocational

¹ ROBERT C. COLE, *An Evaluation of the Vocational Guidance Program in the Worcester Boys' Club*, p. 2, mimeographed report, Worcester, Mass.: Worcester Boys' Club, 1939.

guidance bureau is equally essential. Often an investigation made by one part of a school system with much labor and expense would have been of great value to another part of the same system if the two had only planned and carried it through together. Sometimes data gathered by one part which would be of value to another are quite unknown to the latter.

Assignment of research work. To this question the answer must be that most of the research mentioned in this chapter should be done by the vocational guidance staff—the people who are carrying on the various services. To be sure, the head of the guidance program would be expected to assume the leadership in this matter. He may find it desirable to appoint a committee for the purposes of planning and coordinating research work. But for their own benefit as well as because they are closer to these problems than anyone else, members of the staff who are engaged in the activities of the program must be expected to do much of the actual research work in so far as they are qualified to do it. Constant efforts should be made to improve their qualifications in this respect. As suggested earlier, research workers from colleges and universities may be called in for help. Some of the larger school systems may employ full-time research workers on the vocational guidance staff. But the research service, aimed at improving the effectiveness of the vocational guidance program, will fall far short of its possibilities unless members of the staff as a whole are brought into this work as fully as practicable.

SUMMARY

The principal purpose of the research service is to improve the effectiveness of the other services and of the program as a whole. General descriptions of occupations require checking by local conditions. Local occupations not described in the general literature of the field call for investigation. Occupational information must be kept up to date.

Methods of developing appreciation on the part of high school teachers of the exploratory function of their work and ways of increasing its vocational exploratory values demand careful study. Experimentation for the purpose of securing optimal exploratory values from extracurricular activities and part-time employment is desirable. Investigations covering the best

methods of obtaining the desired personal data concerning pupils from the various sources and compiling and recording these data for convenient use are important. The adequacy of records for counseling purposes, methods of interviewing, methods used in inducing former students to come back for counseling interviews, and ways to use home-room teachers and others for certain counseling responsibilities deserve investigation.

It is necessary to determine by research methods the nature and scope of the vocational education program which should be carried on. Selection of content for every subject included in this program calls for occupational analysis. Methods of teaching, of class management, and of obtaining desirable cooperation from employers and labor groups are matters for careful experimentation. The placement service must investigate specific employment opportunities, methods of establishing wholesome relationships with employers, possibilities of cooperation with public employment offices, and other matters which may contribute to the success of its work. Careful study and evaluation of various methods of determining adjustment needs of individual youth and of serving these needs are necessary; also possibilities of and plans for cooperation with other social agencies in performing an adequate follow-up service. Research pertaining to the effectiveness of the vocational guidance program as a whole is desirable also if carried on in a scientific manner.

Coordination of the research activities carried on by the different services is, of course, essential; also coordination between these activities and the research work of other departments of the school system—psychological clinic, health service, etc.

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CHAPTER XVIII

ORGANIZATION AND ADMINISTRATION OF THE PROGRAM

In earlier chapters discussion has centered chiefly on what is involved in each of the eight services comprising a comprehensive program of vocational guidance and on ways of performing these services. Only incidentally has attention been given to the administrative relationships of the various services to each other and to other departments of the school system. The organization and administration of the program as a whole now require attention.

It should be understood that in what follows an effort is made to propose a more or less ideal setup for such a program as has been described. It is recognized that school systems cannot, if they would, make themselves over at once in order to introduce these proposals. However, the plan of organization presented in this chapter is one toward which a school system might work as opportunities for reorganization arise from time to time. It is a comparatively simple plan, considering the work to be done. It fits into the organization of the school system as a whole. It takes account of all the various purposes of the program of vocational guidance. While planned especially for a rather large school system, it deals with relationships that are basic in all school systems. Provision will need to be made for the same services even in a small system but, as indicated, on a less extensive scale.

Existing types of organization. Before presenting the proposed plan it is well to note the principal kinds of organization now in use in American cities. A few years ago Reavis classified under four headings the types of organization found in his nationwide survey of guidance: (1) centralized bureaus of guidance for secondary schools in city systems, represented by Boston and Cincinnati; (2) city school systems with a central guidance organization but with the individual secondary school considered

the unit, represented by Providence and Milwaukee; (3) centralized bureaus or departments in individual secondary schools, represented by the LaSalle-Peru Township High School and Junior College; (4) central guidance organizations in individual secondary schools which use regular officers and teachers as guidance workers, represented by the Joliet Township High School and Junior College and the New Trier Township High School.¹

It should be noted that Reavis's investigation was not restricted to vocational guidance but dealt with all that bears the guidance label, some of which the author of this book has insisted is organized education rather than any kind of guidance. For example, the Providence plan provides for "educational, social, character, civic, and vocational guidance." It will be recalled that in Chap. II so-called "civic," "social," and "moral" guidance were rejected as kinds of guidance, the point being made that what is meant by these terms is in reality not guidance of any kind, but desirable provisions for organized education along civic, social, and moral lines.

However, it appears that Reavis's classification of existing types of organization for guidance in general applies also in case of vocational guidance, though the degree of emphasis placed on vocational guidance may well have determined the type of organization chosen in some particular school systems. It is the belief of the author that the second type in Reavis's list as given above is best suited to the general organization of American school systems. The plan proposed in the following pages is of this type, though differing in important respects from the plans of Providence and Milwaukee, chiefly because the primary concern here is *vocational* guidance.

PLACE OF THE VOCATIONAL GUIDANCE PROGRAM IN THE ADMINISTRATIVE SETUP OF THE SCHOOL SYSTEM

A vocational guidance program of the type under consideration in this book has its relationships to the school system as a whole and, at the same time, has special relationships to the work of each secondary school in the system. In attempting to set up a satisfactory plan of organization for this program it seems wise to deal first with its place in the administrative

¹ W. C. REAVIS, *Programs of Guidance*, U.S. Office of Education, Bulletin 17, Washington: Government Printing Office, 1932.

arrangements of the school system as a whole, reserving for later discussion the question of the place of vocational guidance in the setup of the individual secondary school.

Pupil personnel work in relation to other activities of the school system. It will be recalled that according to Chap. III the activities involved in the work of a school system appear to fall rather readily into four large groups. The first of these groups, which for want of a better name is called "instructional," includes curriculums, courses of study, teaching, and other activities closely related to teaching, whose primary purpose is to contribute directly to the development of individual pupils.

A second group, called "business management," involves those activities concerned with providing the physical facilities required for instruction, such as buildings, equipment, supplies, etc.

A third group, called "pupil personnel work," includes the activities whose function it is to bring those individuals for whom the schools are provided into the instructional program at such points and in such condition that each individual will derive therefrom the maximum of needed personal development.

The fourth group bears the name "administration" and includes those activities which are concerned with final determination, in the light of existing conditions, of what in general shall be included in the activities of each of the other groups; with seeing that the activities of each group are carried on under as favorable conditions as possible; and with maintaining such relationships between the groups that each separately and all taken together make the maximum contribution to the work for which the school system exists.

It must be kept in mind, however, that many of these activities do not belong exclusively in any one group. Occupational exploratory courses, for example, are not provided solely for the purpose of aiding pupils in selecting suitable vocations and in entering the proper classes in order to obtain the needed preparation for these vocations, which is a personnel function. They also contribute directly to the personal development of pupils, which is an instructional function. In classifying such an activity its controlling purpose must determine whether it belongs in the pupil personnel group or in the instructional group. But in whichever group it falls its relationship to the other group should be recognized.

Vocational guidance a pupil personnel activity. Obviously vocational guidance in a school system, concerned with “assisting individual pupils to choose, prepare for, enter upon, and progress in an occupation”—beginning in the secondary school and continuing into the early years of employment life—is primarily a pupil personnel activity. While some of the services of a comprehensive program of vocational guidance as described in earlier chapters are strongly instructional in character, its controlling purpose places the program as a whole in the personnel group. Other activities in this group, as given on pages 49–51, Chap. III, are shown in Chart 5, which purposely is drawn to accentuate the relations of the vocational guidance services to the secondary schools and leaves out many other administrative features.

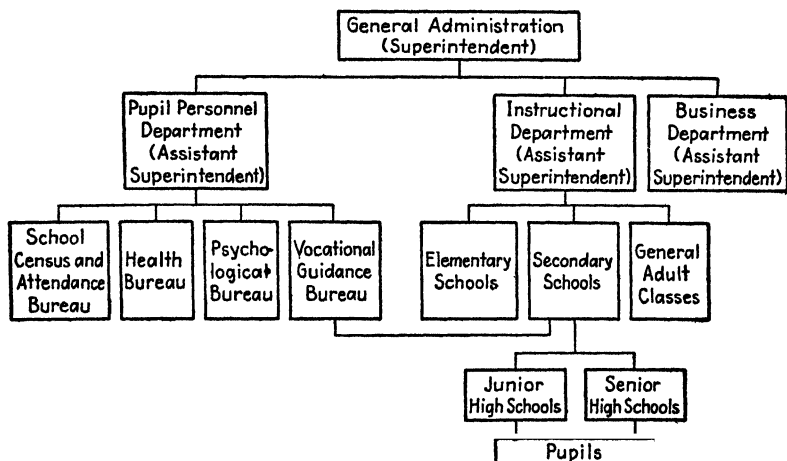


CHART 5.—GENERAL ORGANIZATION OF A CITY SCHOOL SYSTEM.

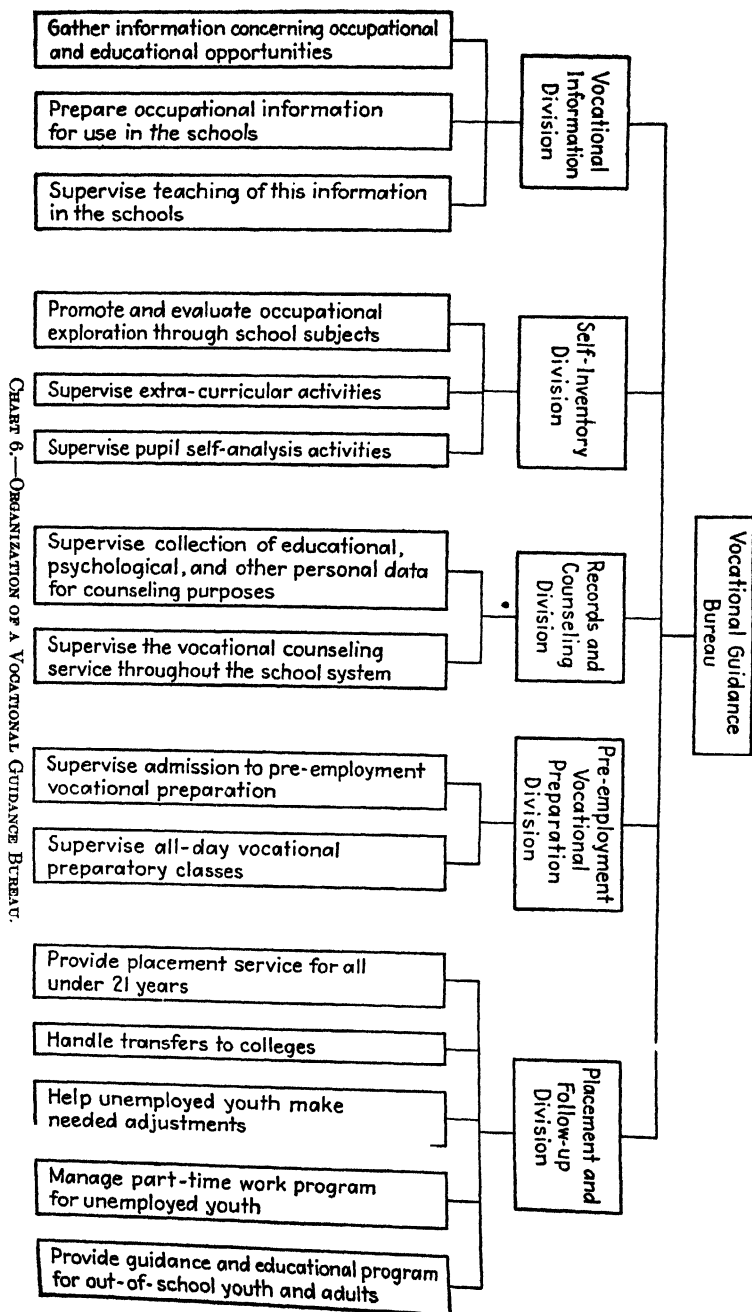
Organization of the pupil personnel department. According to this organization chart, the superintendent of a large school system would have three assistant superintendents, one in charge of instructional activities, another in charge of pupil personnel activities, and the third in charge of business management. The assistant superintendent in charge of pupil personnel activities would have a staff of four assistants or directors, each responsible for a distinct part of the work. One of these would be the director of vocational guidance. Naturally, staff meetings of this group would deal with many problems of cooperation between the vocational guidance bureau and the other bureaus of the

personnel department. Naturally, also, the assistant superintendents in charge of instruction and of personnel work would bring together from time to time the director of vocational guidance and the person or persons in charge of secondary education for the purposes of planning the vocational guidance program in the secondary schools and assuring favorable conditions for carrying it on. General arrangements covering the guidance activities of secondary schools of the system thus would be worked out cooperatively by these assistant superintendents and the members of their staffs who are directly concerned, and arrangements would be made for staff members of the vocational guidance bureau to work through the principals in the various high schools.

Organization of the vocational guidance bureau itself. Turning to the organization of the vocational guidance bureau itself, it is proposed that this consist of five divisions. The director in a large school system might thus have an immediate staff of five members consisting of the chiefs of these divisions. The services to be performed by each division are indicated in Chart 6. It will be observed that the research service described in Chap. XVII is not provided for in this chart. The reason is that research is a proper function of each of the other services. On this account the director of the bureau should bear responsibility for developing and supervising a coordinated plan of research covering all of the other services and participated in by guidance workers throughout the system.

Examination of Chart 6 will indicate that the vocational guidance bureau is expected to promote and evaluate exploration through all subjects of the secondary schools but not to supervise the teaching of even those subjects which have exploration as one of their important aims. For example, industrial arts courses in the junior high school, though rich in exploratory values, would be under the direction and supervision of the instructional department of the school system. The self-inventory division of the vocational guidance bureau would work with and through members of the instructional staff to give these subjects the maximum of exploratory values consistent with their other functions, and would do the same for the other subjects of the secondary schools.

A city-wide supervision of extracurricular activities is provided for under the self-inventory division. The purposes are to make



sure that the exploratory possibilities of these activities are appreciated by those who sponsor them, that the program of such activities is well balanced in the various secondary schools of the system, and that these activities make their maximum contribution to pupil self-inventory.

It will be noted that the plan of organization presented here calls for supervision by the vocational guidance bureau of (1) the teaching of occupational information courses, (2) the teaching of preemployment vocational preparatory courses, and (3) the vocational education of out-of-school youth and adults. While teaching is an instructional activity, it is in these cases so directly concerned with successful transfer from full-time school to full-time employment (the task of vocational guidance) that these three teaching jobs seem to be proper functions of this bureau.

It should be understood that the placement and follow-up division would be responsible for all the activities indicated under it in the chart for the entire school system. If a particular school or the state employment office of the community or a private social agency is called upon to perform or assist in performing one or more of these services, responsibility for its proper performance would still rest with this division of the bureau. If and when organized, the Adjustment Institute which was discussed in Chap. XVI would take over the duties of the placement and follow-up division.

THE VOCATIONAL GUIDANCE SETUP WITHIN A SECONDARY SCHOOL

That the program of vocational guidance within any secondary school of the system is a school enterprise in which all members of the staff participate, rather than the sole responsibility of a counselor or group of counselors only, has been recognized throughout this book. Here and there mention has been made of ways in which this or that member of the staff would contribute to the program. It now remains to summarize the vocational guidance duties of the various staff members and to consider the type of organization that seems likely to bring satisfactory results in the performance of these duties. It should be understood that many staff members will do more but none should do less than is included in this summary.

The principal's place in the program. Good administration of a school system requires that the principal of each school shall be the responsible administrative authority for all the work done in that school, subject always to the direction of the superintendent and the immediate members of his staff. This means that vocational guidance activities, promoted and supervised throughout the system by the bureau of vocational guidance, are finally the principal's responsibility as far as his school is concerned. The bureau of vocational guidance must work through the principal and not directly with counselors, home-room teachers, subject teachers, and others, except as authorized by the principal.

The secondary school principal thus becomes a key man of the vocational guidance program within his school. If the program is to be a success he must be in sympathy with its purposes and must give it his wholehearted support. It is his business to accept the bureau's proposals for his particular school or to make other proposals in harmony with the system's general guidance plan which are calculated better to serve the needs of his school. It is his business to provide as favorable conditions as practicable for carrying on the various guidance services—equipment and supplies for occupational exploratory experiences, suitable office arrangements for counseling, an adequate record system, and the like. He it is who, with the assistance of his head counselor must be expected to help members of his staff to see and perform their particular duties in the program—subject teachers, home-room teachers, the librarian, and others. He must be expected, also, through the head counselor, to check on the effectiveness of the work, and to promote and encourage such research activities as will increase its effectiveness.

Of course, in all these matters he will have the assistance of vocational guidance specialists of the bureau's staff and of his own staff (the counselors) but responsibility for such administrative action as may be needed will still be his. If the school has one or more assistant principals or a dean of boys and dean of girls, some of the duties just listed may be passed on by the principal to these officers. However, responsibility still centers in the principal's office.

The work of the head counselor and his staff. The head counselor is the school's specialist in vocational guidance. In

schools of 300 students or more he may be expected to devote his entire time to this program. In larger schools he will need full-time or part-time assistants who have had considerable training in the guidance field. In a small school both he and those who work with him will teach as well as perform vocational guidance services. With assistance from the bureau's office and in consultation with the principal, the head counselor will plan and coordinate the vocational guidance program within the school.

In addition to counseling students, he will be the principal's agent in supervising the vocational guidance work of other members of the staff, including home-room teachers. Also he will represent the principal and the bureau in supervision of the teaching of occupational information and in providing as effective occupational exploration as is practicable. Upon him will rest responsibility for gathering and keeping up to date the student records used in counseling interviews, for obtaining additional information concerning health and mental characteristics of individual pupils by sending them to health and psychological examiners, and for sending these records on to the placement office when the pupil seeks employment. A more complete discussion of the counselor's duties may be found in Chap. XIII.

The place of the home-room teacher. Next in line come the home-room teachers whose vocational guidance duties include gathering and reporting to the head counselor's office significant information concerning individual pupils, performing themselves certain types of counseling services agreed upon with the head counselor, referring individuals to the counselor when they need his assistance, and cultivating among their pupils a favorable attitude toward the vocational guidance program. Usually these and other important home-room services are performed most successfully when each home-room teacher has charge of the same group of pupils throughout their three years of junior or senior high school.

The tendency in some schools to center the entire guidance program in home rooms and to expect the home-room teacher to do the counseling grows out of the conception of guidance which identifies guidance with education. Many of the so-called "guidance" duties assigned to home-room teachers are essentially instructional in nature, designed for the worthy purpose of contributing to the pupil's development along health, social, civic,

moral, and cultural lines but not closely related to "assisting the individual to choose, prepare for, enter upon, and progress in an occupation." Where the guidance program centers in the home room it will usually be found that *vocational* guidance is sadly neglected. This is not surprising since few home-room teachers possess either the needed training or the interest required for effective vocational guidance. Besides, they have so many other duties to perform that they do not have sufficient time for this one. While some schools use a full regular period one day each week for home-room activities, and briefer periods on the other days, in many other schools the amount of time assigned to home-room work is entirely too short and the opportunities for private interviews with pupils far too infrequent for effective vocational guidance. A thoughtful teacher of maturity and experience who was deeply interested in vocational guidance described the home-room period in the large high school where she taught as follows:

The home-room period is a fifteen-minute period, and is usually the busiest period of the day. The teacher takes the attendance, makes out her report, makes out excuses for students who have returned after absence, confers with these regarding sore throats and temperatures and if necessary writes out permits for them to go to the school nurse, questions tardy pupils and assigns them to an extra period at the end of the day, reads and interprets the bulletin board notices, assists in making out any special blanks which call for information, etc., etc. The home-room teachers are counselors, clerks, disciplinarians, broadcasters of the latest news of the day, police detectives, and distributors of early morning cheer.

Obviously vocational guidance has little chance in such a home room which, by the way, had 40 pupils. While the conditions here described may be exceptional, few home-room teachers have that freedom from administrative and disciplinary duties which is essential to effective counseling. As Douglass says, "Except in those schools in which there are competent and forceful head counselors or chief advisers with the authority and the time to direct the activities of the advisers, the home-room, or group, advisory organization has rarely been very successful as an instrument for guidance."¹

¹ HARL R. DOUGLASS, *Organization and Administration of Secondary Schools*, p. 193, Boston: Ginn and Company, 1932.

The place of the subject teacher. The subject teacher's first duty is, of course, instructional; namely, to make his subject contribute as much as possible to the development of his pupils. However, in doing this he has exceptional opportunities to perform also certain vocational guidance services. In fact, no other member of the school staff is so favorably situated to perform some of these services. One of them, as noted earlier, is to help his pupils by means of the subject he teaches to discover their abilities and limitations. Another is to observe and report to the head counselor aptitudes, special interests, and outstanding personality traits of his pupils. A third is to assist his pupils in obtaining significant information concerning opportunities and requirements of occupations based upon or closely related to the subject he teaches.

Others include sponsoring a club or other extracurricular activity in such manner that it yields rich exploratory values to its participants, counseling certain pupils who are keenly interested in his subject, referring pupils to the head counselor, and cooperating in certain types of vocational guidance research projects, especially those pertaining to the services just mentioned. Like the home-room teacher he, too, should help to build up a favorable attitude toward the vocational guidance program.

Through the business and industrial contacts which he makes in gathering current material for his teaching he may often be helpful to the placement office in finding suitable employment for pupils leaving school. To be sure, the contribution which a subject teacher is able to make to the program depends upon his subject, his personality, his interest in youth, and other factors. But every teacher is in position to make some contribution along the lines mentioned above. The wise head counselor will study the teaching staff of his school in order to obtain as much assistance as possible from each member in improving the various vocational guidance services.

The school librarian's part in the program. The school librarian occupies a unique position in relation to that part of the program which deals with supplying information concerning occupations. This important member of the school staff brings together for convenient use occupational information material contained in the library, orders new material of this type in

accordance with a plan worked out to serve the needs of the school as a whole, calls attention to this material in an interesting manner by means of notices on the bulletin board and in the school paper, and helps individual pupils to find information concerning particular occupations which interest them. The librarian may well report to the head counselor cases of pupils who read extensively along some special line, and also send to the same officer notes concerning those personality traits observed in individual pupils which seem to have significance in relation to vocational plans.

An organization chart for the high school program of vocational guidance. It is difficult to present in graphic form the setup which has just been discussed for vocational guidance within a high school. However, Chart 7 shows fairly well the

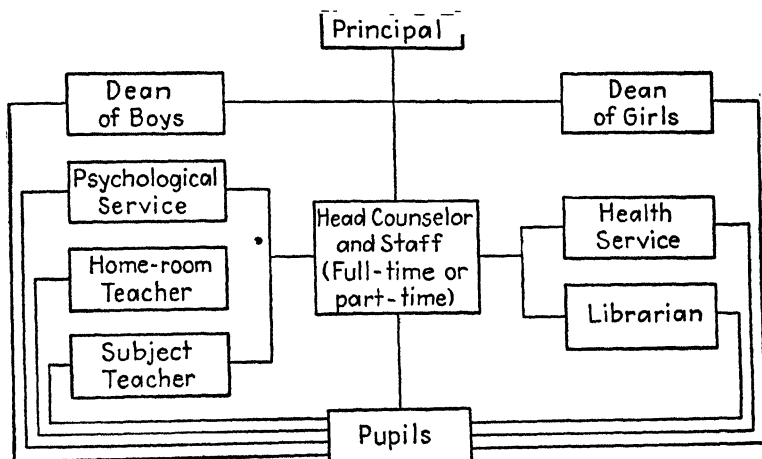


CHART 7.—ORGANIZATION FOR VOCATIONAL GUIDANCE IN A SECONDARY SCHOOL.

relationships among different members of the school staff as far as this particular work is concerned. It should be understood that this chart deals only with the school's vocational guidance responsibilities and not with other aspects of administration. The principal's administrative relationships to other than vocational guidance members of his staff do not appear.

At the same time it should be understood that the relationships between vocational guidance and other forms of guidance discussed in Chap. II are so close that the same organization might well be expected to care for these other forms of guidance also.

In fact, because of this relationship and because of the strength of youth's interest in vocational success these other forms of guidance should benefit by such an arrangement. It will be observed that the counseling staff, composed as it should be of the school's specialists in the field, occupies the central position. At the same time, it is shown that all other members of the staff are related both to the counselors and to the pupils in carrying on the program.

ORGANIZATION AND ADMINISTRATION OF THE ADJUSTMENT INSTITUTE

It will be recalled that upon the Adjustment Institute proposed in Chap. XVI, to which all youth of the community would be transferred as they leave the secondary schools, was placed responsibility for the counseling, placement, continued education, part-time public work for the unemployed, and recreational activities of those who enter it. In order that these services may be performed properly, a carefully planned organization is necessary of which only a preliminary sketch can be presented here.

The institute would require an official head, probably called a principal, working under the general leadership of the director of the bureau of vocational guidance or directly under the assistant superintendent in charge of the pupil personnel department.

Provision for counseling. A head counselor would be needed and a group of counselors, the number in the group depending upon the size of the school system. All the senior high school counselors should belong to this group, each serving part-time in the institute in addition to carrying on the work in the school to which he is attached. This service might consist of only 2 hours' work one evening each week, but it would make the counselor available for conferences with the same youth who were counseled by him while they were still in high school. In a large city the head counselor might require the assistance of full-time counselors, also.

Provision for placement. A head placement worker, with a staff whose size is determined by the number of youth to be served, is necessary. As noted earlier, all the organized placement work for the youth of the community would center in the institute. This should be true whether the actual placements are made by the placement department of the institute or through

the state employment office of the community, the former arrangement being highly desirable for reasons discussed earlier.

Provision for continued education. The continued education part of the institute's service would call for a department or division with a qualified staff of coordinators and teachers. This department would have charge of the entire adult vocational education program as well as of that provided for the preparation for employment of those youth who have left the regular secondary schools of the community. All-day classes preparing for specific vocations, part-time classes, evening classes, supervised correspondence study, and other forms of educational activities would be included under this department. In a large city considerable organization would be necessary in order to carry on this part of the institute's work, much of which is already done by many school systems under a different setup.

Provision for part-time employment. Provision would be necessary for organizing and administering the part-time work on public projects planned and carried on to help unemployed youth acquire desirable work habits and experience and earn a small weekly wage, pending placement in full-time regular employment. How large a staff would be required for this task in a given community cannot be determined in advance, though some light on the subject might be obtained from the inadequate program of this type now conducted by the N.Y.A. Of course, what needs to be done will depend on employment conditions; and what can be done, on the amount of money made available from federal and other funds for this work. However, the same staff could properly concern itself, also, with aiding employed youth to form the habit of participating wisely in community-service activities without pay.

Provision for recreation. Finally, the recreational needs of its youth, using the term "recreational" in a broad sense, seem to demand that the institute set up a department in this field. While this department would probably devote its major interest to unemployed youth, much more needs to be done than is generally realized to provide adequate recreational facilities for employed youth and to help them develop wholesome use of that portion of their leisure time devoted to recreation.

Of course, close coordination of the work of these various departments, under the leadership of the principal, would be

necessary; also coordination of the work of the institute with that of other local agencies interested in the welfare of youth. All the departments taken together are for the purpose of helping youth get off to a good start when they leave high school, a start that gives promise of continued individual development as these youth advance in life.

ORGANIZATION FOR A SMALL SCHOOL SYSTEM

When one undertakes to set up a program of vocational guidance and adjustment in a school system that serves a town of only a few thousand population, it is quite apparent that an expensive organization with several full-time workers is out of the question. It may be impossible even to employ a full-time person to direct the program. Yet the youth of this community, both in school and out, are in need of the services that have been discussed just as truly as are similar youth in large cities where a strong staff can be maintained. If these needs of youth in small cities and towns are to be met, some kind of organized provision for the purpose is just as necessary as in larger communities.

The solution to this difficult problem seems to lie in assigning each of the services that have been considered to a member of the school staff on a part-time basis or, in some cases, as an extra-curricular responsibility. It may be necessary to assign two or more of the services to the same person. The high school principal may serve also as director and head counselor. The important features are that the best possible provision be made for each service and that the best available member of the staff be made responsible for that service. The general functional plan of organization, then, remains the same regardless of the size of the school system.

ORGANIZATION FOR RURAL COMMUNITIES¹

It must be granted that rural youth are as much in need of vocational guidance and adjustment as are those in cities and towns. It does not follow that the boy who happens to live in the country is best fitted for dairy farming because his father is a dairy farmer, any more than that a boy who lives in the city

¹ For a more complete discussion of vocational guidance for rural youth see GEORGE E. MYERS, *The Problem of Vocational Guidance*, Chap. XII, New York: The Macmillan Company, 1929.

should become a bricklayer because his father is a bricklayer. The farmer's boy is more likely to follow his father's occupation because the family capital is tied up in land and barns and cows. But the chances are just as great that he is better fitted for some other type of farming or for some industrial, business, or professional occupation as that the bricklayer's son is better suited for some other occupation than bricklaying. A comprehensive program of vocational guidance for rural youth should result in keeping on the farm those who are suited to farm life and should distribute these among the different kinds of farming according to their aptitudes and interests. It should result in attracting to city occupations only those who are better suited to these occupations than to farming.

In those rural areas that are served by consolidated schools, the same type of organization for vocational guidance and adjustment that has just been discussed for small cities and towns, seems to be both practicable and desirable. In fact, some consolidated schools have better facilities and more favorable general conditions for a guidance program than have many small school systems in incorporated towns.

The most difficult problem of organization for the kind of guidance program under consideration arises in connection with one-teacher schools in the open country. According to reports of the U.S. Office of Education, there are still several millions of children attending such schools. To be sure, some of these children later attend high schools in neighboring cities and towns and may obtain vocational guidance there, but many, partly because they have had little if any vocational guidance, never attend any other school than that of their childhood.

Probably the most effective way to meet this situation is for the county superintendent of public instruction to be provided with an assistant superintendent whose chief responsibility is vocational guidance and adjustment. This assistant would serve as director, head counselor, and placement officer for the entire county. He would be expected to supervise the guidance work done by teachers, to provide needed occupational information material for the schools, to see that a suitable pupil-record system is set up, to counsel individual pupils referred to him by teachers in accordance with a well-considered plan, and to render as much placement and follow-up service as possible to those who

are out of school. As far as practicable he would use carefully selected teachers of the county to assist him in the performance of these and other duties.

To be sure, this is a much simpler matter in a county whose schools are organized on the county unit plan with a single board of education for the entire county, and the county superintendent appointed by this board, than it is in a county with a separate board of education for every one-teacher school and the county superintendent elected by popular vote. Yet the latter conditions still exist in many states. It seems unlikely that any plan for vocational guidance will prove very effective under these conditions. In fact, if vocational guidance—and one may say if education itself—is to serve the needs of rural youth the county unit plan and many more consolidated schools than there are at present are practically necessary.

COOPERATION AMONG SCHOOL SYSTEMS

No school system's plan of organization for vocational guidance and adjustment can be considered adequate that concerns itself only with the youth of its own schools. Provision must be made also for the program to serve those beyond compulsory school age who come into the community but do not enter its schools. Young people who come into a strange city, whether from another city or from the country, often are in greater need of guidance and particularly of placement and follow-up services than are local youth. Unfortunately, however, little consideration usually is given these young people by the school placement office, except to resent their coming into competition with graduates of the local schools.

What seems to be needed is an arrangement for transferring out-of-school youth from one community to another as in-school youth have long been transferred. If a high school boy moves from one city to another he is given a transfer to a high school in the city which becomes his new home. After the acceptance of the transfer he receives the same consideration as those who came into the high school from the elementary schools of the city. The adjustment institute already described provides the necessary machinery for the same procedure in dealing with out-of-school youth. Part of its business is to follow its own youth and help them establish themselves in other communities. An

equally important part should be to receive youth from other communities and serve them as if they were its own. A system of transfers would care for this situation.

SUMMARY

The effectiveness of a vocational guidance program depends not only upon the fact that provision is made for all of the eight services considered in earlier chapters but also on how the program as a whole is set up and administered. In considering a desirable plan of organization and administration for such a program, the relationships of the program to the rest of the school system and its relationships within the secondary school must both be taken into account.

Two closely related functions of a school system are teaching and pupil personnel work. The former is concerned *directly* with the educative process—development of the pupil by means of his school environment. The latter is concerned *indirectly* with the same thing, its direct concern being to bring the pupil into the school environment under the most favorable conditions for his development. In a large school system organization of a pupil personnel department with an assistant superintendent in charge is a logical step. Vocational guidance is primarily a pupil personnel function. It may well be assigned to a vocational guidance bureau set up within the pupil personnel department, coordinate with bureaus which deal with attendance, health, research, and the like, with a director in charge.

Five divisions of the bureau seem desirable: vocational information; self-inventory; records and counseling; preemployment vocational preparation; and placement and follow-up divisions. Each division would be expected to supervise its appropriate activities throughout the school system. In a smaller school system the same general setup is desirable with a larger part of the program assigned to one individual or with the work divided among staff members who have other duties or with both of these arrangements.

The vocational guidance program within a secondary school is a *school enterprise* in which all members of the staff participate. The principal, as key man, cooperates with the staff of the bureau in planning the program for his school. He arranges for needed supervision by staff members from the bureau, provides favorable

conditions for carrying on the work, helps members of his staff to see and perform their particular duties in the program, checks on how effectively these duties are performed, etc.

The head counselor is the principal's agent in supervising the guidance program within the school. He counsels pupils and arranges for counseling by others. He has direct responsibility for seeing that adequate pupil records are available for counseling interviews. He helps pupils seeking work to make proper use of the placement services of the school system, and performs many other similar duties.

Home-room teachers report to the head counselor's office significant data concerning individual pupils, themselves do certain types of counseling, cultivate a favorable attitude toward the vocational guidance program, and cooperate with the head counselor in other ways.

Subject teachers help pupils to discover their abilities and limitations, observe and report to the head counselor special aptitudes, interests, and personality traits of particular pupils, assist their pupils to obtain information concerning opportunities and requirements of occupations closely related to the subjects which they teach, etc.

The school librarian sees that the library functions as effectively as possible in providing needed information concerning occupations and reports to the head counselor on special interests shown by pupils in their reading. Other members of the school staff are brought into the program appropriately by the principal and the head counselor.

The Adjustment Institute calls for a special type of organization either responsible to or coordinate with the bureau. The director or principal would function for this institution with reference to vocational guidance much as the principal functions for his high school. A head counselor would have the assistance on a part-time basis of all the counselors in the senior high schools. Other assistance might be needed. The entire placement staff of the school system might well be transferred to the Adjustment Institute. A special staff for organizing and administering the part-time employment program for unemployed youth would be necessary. A special staff would be required for the educational program provided and another for the recreational and health program. Careful planning for the organization and adminis-

tration of the Adjustment Institute will be necessary if it is to measure up to its possibilities of service to youth.

Small school systems and rural schools present special problems in organizing and administering vocational guidance. Essential things in meeting these special problems are to see that all the services are provided, that some individual is responsible for each, and that the services are coordinated. Consolidated rural schools make easier the organization of an effective program of vocational guidance in rural areas.

Some plan of cooperation among school systems is necessary if the counseling, placement, and follow-up needs of out-of-school youth who move from one school district to another are to be served.

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